

Bridging the GAPs

FARM GUIDE

Good Agricultural
Practices and
On-Farm Food Safety
for Small, Mid-Sized,
and Diversified Fruit
and Vegetable Farms

Based on the USDA Good Agricultural Practices/Good
Handling Practices (GAP/GHP) Audit Program standards

A publication of the Washington State
Department of Agriculture

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Thanks to the following farms that allowed us to photograph their best practices for this guide

Full Circle Farm, North Bend
Imperial's Garden, Wapato
Ralph's Greenhouse, Mt. Vernon
Skagit Flats, Mt. Vernon
Tahoma Farms, Orting
WSU Puyallup Research & Extension Center, Puyallup

Bridging the GAPs Project Acknowledgements

Farm Walk Host Farms

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Alvarez Organic Farms, Mabton
Imperial's Garden, Wapato
Local Roots Farm, Duvall
Pheasant Fields Farm, Silverdale
Skagit Flats Farm, Mt. Vernon
Viva Farms, Burlington
Williams Hudson Bay Farm, Walla Walla

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Amy Moreno-Sills, WSU Puyallup Research & Extension Center
Holly Thompson, WSU Snohomish County Extension
Pat Munts, WSU Spokane County Extension
Jenelle Ottmar, WSU Grant-Adams Area Extension

Other Partner Organizations, that provided opportunities for us to present on GAPs

Bainbridge Graduate Institute
Cascade Harvest Coalition
Organicology
Seattle Neighborhood Farmers Market Association
Tilth Producers of Washington
Washington State Farm Bureau

Project Web Support

Jill Kunz, WSDA

Other Project Support

Billy Campbell

The Bridging the GAPs work and this guide were made possible through a grant from the USDA Specialty Crop Block Grant program.

This guide is available at no cost (unless shipping charges apply) in English and in Spanish, by request by calling the Office of Compliance and Outreach at 360-902-1905 or by emailing oco@agr.wa.gov. You may also download it at www.agr.wa.gov/inspection/GAPGHP/guide.



This guide was developed as a resource to assist farms as they implement good agricultural practices and prepare for GAP/GHP audits. Writing a food safety plan using the resources and templates provided is a good place to start, though it does not guarantee a successful audit. The GAP/GHP standards may be adjusted over time, so check the WSDA GAP/GHP website for updated information: agr.wa.gov/inspection/FVInspection/GAPGHP.aspx.



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RESOURCES

Most resources and templates are available as Word documents [here](#), so you can download and adapt them for use on your farm.

For pdfs of the resources and templates included in the guide, click on the chapter header below.

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How to Use this Guide

Bridging the GAPS

Opening Markets for Small, Mid-sized, and Diversified Farms



WSDA GAP auditors and educators have spent extensive time at farm-walks on small, diversified farms in order to clarify how to manage these farms for GAPs implementation and audit.

Project Background

This guide is part of Washington State Department of Agriculture’s Bridging the GAPS project, which seeks to facilitate best practices for on-farm food safety by developing education and outreach services in support of Good Agricultural Practices (GAP) and Good Handling Practices (GHP). The project provides technical assistance to farms preparing for United States Department of Agriculture (USDA) GAP/GHP audits, as well as for farms simply seeking best on-farm food safety practices without the intention of being audited. Washington State Department of Agriculture (WSDA) staff saw the need for this proj-

“I wish I’d been able to go to an on-farm workshop like this one when I was writing our farm’s first food safety plan. I was overwhelmed with information and the markets demanded certification. I created a plan that worked, but having support like this would have been really helpful.”

David Young,
Food Safety Coordinator,
Imperial’s Garden,
Wapato, WA



ect from farmer feedback provided over several years at conferences, workshops and via surveys. All signs indicated that concerns were increasing regarding food safety market and regulatory requirements, and fruit and vegetable growers were seeking affordable ways to adapt their farms to meet these standards.

The main goal of the Bridging the GAPs project is to identify and share best practices relating to on-farm food safety for small, mid-sized and diversified fruit and vegetable farms. The WSDA team coordinates workshops and tools for the farming community to share examples of safe growing practices that meet the USDA GAP/GHP certification standards. WSDA has sought to engage growers throughout the project by soliciting questions, concerns and examples of successful solutions. The project also shares up-to-date information about FDA's Food Safety Modernization Act (FSMA) proposed Produce Safety Rules and other current on-farm food safety topics.

The Bridging the GAPs team also aims to help WSDA GAP auditors better serve small and diversified farming operations. WSDA's licensed USDA GAP/GHP auditors—experts on standards for large-scale and single crop production—are receiving hands-on education, tools and resources to help them understand the challenges of smaller-scale diversified producers and recognize record-keeping and food safety solutions that work for these farms.

This Guide

This guide is intended to assist fruit and vegetable growers as they begin to implement and document good agricultural practices for on-farm food safety, and as they prepare for a third-party audit of those practices. The information in this guide is based on the USDA Good Agricultural Practices and Good Handling Practices Audit (GAP/GHP) standards. In order to provide accurate, useful information, the WSDA team has worked closely with WSDA auditors, who provide the audits in Washington State through a cooperative agreement with USDA.

WSDA's Bridging the GAPs project has engaged auditors and educators to identify tips and best practices that will be cost-effective on small, mid-sized, and diversified farms, including those with livestock and other farm animals. This guide aims to provide information that will help growers implement good on-farm food safety practices and provide auditors with a basic guide for issues of most concern to growers with smaller, diversified farms

The guide generally follows the flow and structure of the USDA GAP/GHP Audit Checklist which provides a comprehensive look at the kinds of risks you should consider when creating a tailored food safety plan for your farm. The checklist will be the guiding document followed by an auditor when conducting a GAP audit. Consider drafting your policies, standard operating procedures (SOPs) and corrective actions plans as you work through the guide, to start to develop a draft Food Safety Plan, whether for an audit or simply to use as a best practices guide on the farm.

All GAP/GHP audits are voluntary. Most growers who seek an audit do so to meet requirements of a particular buyer or to enter a new market that requires or prefers a third-party food safety certification. Growers can request an audit for any or all of the checklist sections, called “scopes.” Growers with smaller-scale, simple operations with less infrastructure are most likely to choose to be audited for General Questions (required for all audits), and Parts 1, 2, 3 and/or 4. Many small farms will only need General Questions and Parts 1 and 2, based on common practices on most small, diversified farms. The GAP/GHP Audit Checklist sections that are most relevant for small diversified farms are treated in detail here:

- ✦ General Questions
- ✦ Part 1 Farm Review
- ✦ Part 2 Field Harvest and Packing
- ✦ Part 3 House Packing Facility
- ✦ Part 4 Storage and Transportation

The remaining sections of the audit checklist (6 and 7) will not be covered here, as they generally apply to larger farms or wholesaler/distributors, and would be outside the scope of the Bridging the Gaps project. (Part 5 – Traceability has been incorporated into all sections of the audit, and is no longer a separate scope.)

Each chapter provides details and best practices for a different section of the audit. By following the guidance and using the worksheets collected at the end of each chapter, you can create a working draft of a food safety plan.

Best practice examples, photographs, and sample policy language are included in this guide to provide insight on strategies other Washington farms are using to meet the standards, and help guide development of a food safety plan. You may wish to model your farm’s policies on some of these. However, each farm is unique, and you must follow recommended procedures for risk assessment in order to develop policies that reflect your farm’s risk profile.

To assist you in developing your farm’s unique food safety plan and SOPs, worksheets and templates relevant to each audit scope are included at the end of each chapter. Sample policies, worksheets and templates are also included in Word or Excel format on a flash drive with hard-copy binders, or are available on the WSDA website at <http://agr.wa.gov/inspection/GAPGHP/>, so that they can be available for you to adapt for your own use.

The GAP/GHP Audit

Getting Started



As you make the decision about whether you need a third-party food safety audit, or whether you simply want to use this guide to help you review and improve your food safety practices, you may want to consider how the USDA GAP/GHP Audit program works, and why others are choosing to get an audit. This introduction will provide an overview of the GAP/GHP program and current topics affecting farmer decisions to participate, as well as the documentation, costs, and process for a GAP/GHP audit.

This chapter provides information about the USDA Good Agricultural Practices and Good Handling Practices Audit Program and the audit process.



What is GAPs and Why is it Valuable to a Farm?

The USDA Good Agricultural Practices/Good Handling Practices Audit Program is a voluntary food safety audit and certification program for fruits and vegetables, which evaluates farm practices against the standards set by USDA in order to minimize risks of microbial contamination. It covers production, packing, handling and storage. Good Agricultural Practices (GAP) and Good Handling Practices (GHP) are also more generic terms used to refer to these practices, which may be implemented without an audit program, or may be audited by various private entities, each of whom will have variations on the requirements.

Many farmers are interested in implementing GAP/GHP practices, with or without an audit step, in order to decrease the risk of a food safety problem, and protect themselves and their customers from contaminated product.

As more buyers require third-party food safety certification for growers and processors to sell into markets such as schools, hospitals and retail stores, even small farms face pressure to become GAP/GHP certified, though the certification is not required by state or federal regulations.

USDA GAP/GHP audit is valuable in a variety of marketplaces, as assurance that risks have been assessed and effective mitigation strategies have been identified, articulated, trained to, and documented. Some buyers conduct their own food safety audits, or require other specific third-party food safety certifications, while others will ask questions or require farms to fill out a food safety checklist in lieu of providing certification documents. Many of these marketplace requirements relating to food safety practices are based on or similar to the USDA GAP/GHP standard, and this guide may also help you prepare for those. It is important to discuss food safety requirements with your buyers so you know you are preparing to meet them.

Some growers are also interested in GAP/GHP as a step toward preparing for the upcoming FDA Produce Safety Rules being developed following passage of the federal Food Safety Modernization Act (FSMA). FSMA establishes science-based minimum standards for the safe production and harvesting of fruits and vegetables. The law is a sweeping reform and represents a shift of FDA's focus away from responding to contamination, and toward prevention of contamination in the nation's food supply. The FDA Produce Safety Rules will be mandatory and will apply to all farms except those that qualify for exemptions, which will be codified in the final rules.

Since FSMA was signed into law in 2011 food safety practitioners have speculated that a farm that wants to prepare for FSMA would do well to implement GAPs. The July 10, 2014 issue of *the-packer.com* reports that "Food and Drug Administration officials say the agency will consider companies' food safety histories when prioritizing inspections under the Food Safety Modernization Act." The article also says that "growers and other companies will fare better under the new system if they are already practicing good food safety protocols."

While FSMA is not the focus of the Bridging the GAPs project, it is important to address it briefly, as a great deal of the anxiety about food safety planning is a direct result of the release of the draft Produce Safety Rules associated with FSMA. As of September 2014, the rules are still in draft form, which means the details are impossible to discern. However, fundamental principles are clear. FDA has developed a Farmer's Toolkit that includes a Fact Sheets series covering topics related to specific kinds of fresh produce, background on FSMA, and key issues such as agricultural water and alternatives and variances. There is also information on the rule-making process and an FAQ. Visit fda.gov/downloads/Food/GuidanceRegulation/FSMA/UCM360295.pdf for the most current information.

FSMA Basics and Potential Timeline

TIMELINE

- ✦ Became law when President Obama signed it on January 4, 2011
- ✦ Final Rulemaking – Ongoing as of July 2014
- ✦ Farms covered by FSMA, as stated in the draft rules, will have the following amounts of time after the effective date (60 days after the FINAL rule is published in the Federal Register) to comply with the rules:
 - Very small businesses (average annual value of food sold during the previous three years \leq \$250,000) would have four years after the effective date to comply; for some water requirements they would have six years.
 - Small businesses (average annual value of food sold during the previous three years \leq \$500,000) would have three years to comply; for some water requirements, they would have five years.
 - Other businesses would have two years after the effective date; and four years to comply with some of the water requirements.

POTENTIAL EXEMPTIONS

The produce safety rule will apply to farms that grow, harvest, pack or hold most fruits and vegetables when they are in their raw or natural (unprocessed) state.

As the rules are currently written, some fruits and vegetables may be eligible for exemption if they are in any of the following categories:

- ✦ Is rarely eaten raw (USDA will finalize a list of produce in this category).
- ✦ Will be receiving commercial processing to adequately reduce the presence of microorganisms (USDA will specify processes that meet the standard).
- ✦ Is produced for on-farm or personal consumption only.

Refer to the guidance provided at FDA's website for more detailed information on these general rules. (source: fda.gov/downloads/Food/GuidanceRegulation/FSMA/UCM360734.pdf)

An individual farm may also be exempt from the requirements in FSMA (based on current draft rule), under the following circumstances:

- ✦ The annual value of food sold during the previous three-year period is \leq \$25,000
- ✦ The farm is both earning an average of \leq \$500,000 over the previous three-year period AND is selling more of their product to "qualified end-users" than to other buyers. "Qualified end-users" are defined as:
 - Either the consumer of the food, or
 - A retail food establishment or restaurant in the same state as the farm, or within 275 miles of the farm.

How to Meet the Standard

- There are a wide variety of ways to meet food safety standards and secure a GAP certification. The success or failure of an audit will depend on effective identification and mitigation of the food safety risks identified around and within your specific farm operation. This guide doesn't guarantee a successful audit. Examples of innovative ways to meet requirements are distributed throughout the manual and are intended to show the spectrum of food safety planning, from the smallest alteration to a wash table, up to large hydro-coolers. These are examples of solutions to food safety challenges and represent some of the many options. In any situation, the auditor will need to determine the appropriateness of the solution your farm is using and will evaluate that strategy based on how well it mitigates the risk of contamination.
- There is no single correct way to implement GAPs; every grower's process and the resultant food safety plan will be unique to that operation. The GAP planning process requires you to anticipate your unique contamination risks and develop strategies to prevent and manage that risk. The USDA GAP/GHP Audit Checklist, and this guide, will provide you with guidance about the way the auditor will evaluate and score your plan, bearing in mind that GAP is truly an individual plan that follows consistent principles to help minimize the risk of microbial contamination of your farm's product.

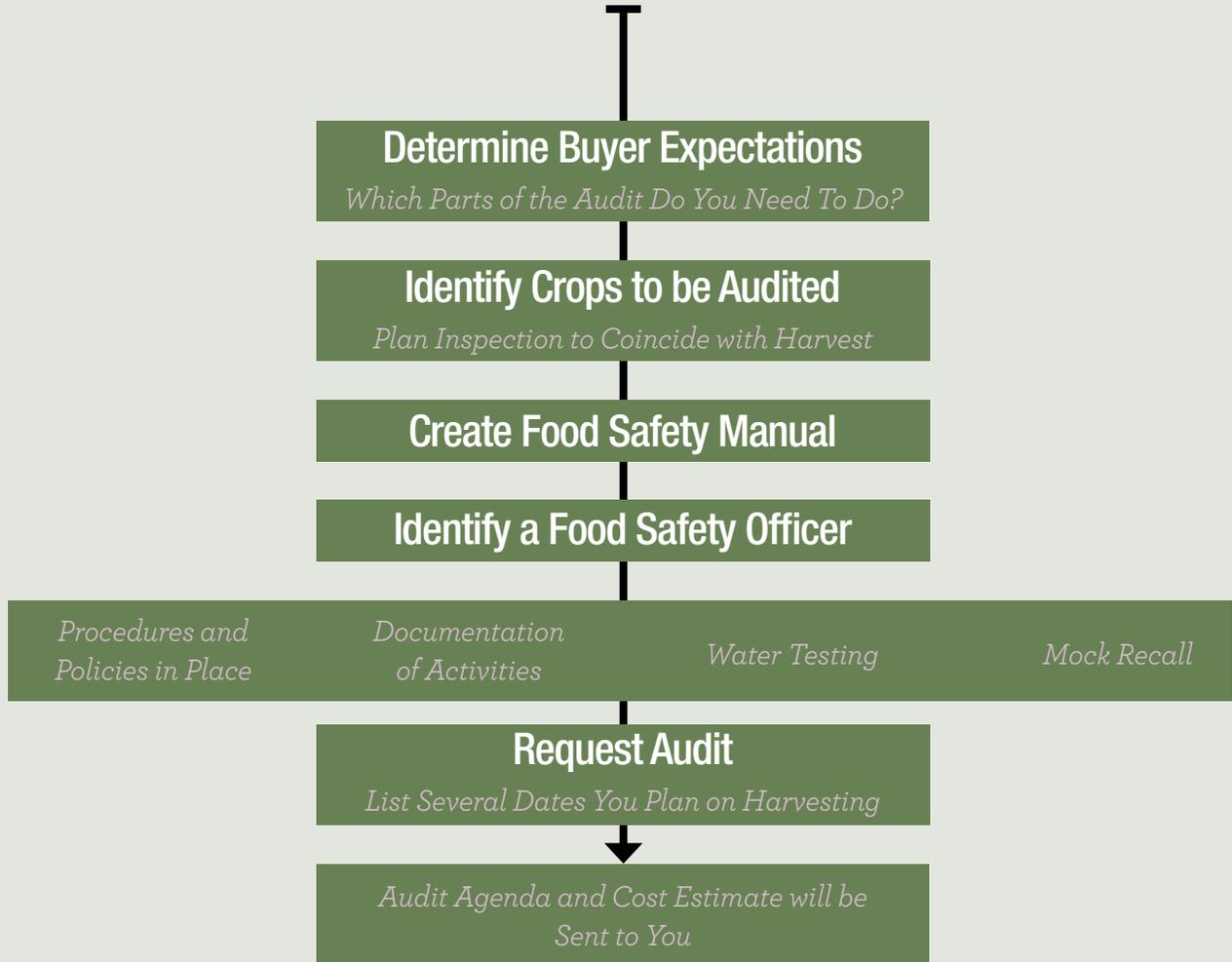
My farm is certified Organic. How does this interact with GAP certification? Do I need both? Are they compatible?

The two programs have different goals and requirements, and your need for each is determined by your market decisions and business model. It is certainly possible to successfully meet both standards on your farm.

As with organic certification, GAP is based on a system plan or implementation of standard operating procedures and requires thorough recordkeeping. While organic standards require operations to prevent contamination of organic crops from prohibited input materials and prevent commingling of organic and nonorganic products, GAP certification ensures that the operation is following practices to minimize the risk of microbial contamination of crops. Both regulations cover practices from planting through harvest, packing, storage and transportation. More specific information in response to this question is provided in the WSDA Organic Program Fact Sheet in the resource section of this introduction.

Just as there are countless variations from one farm to another, so there are a variety of management practices that are appropriate in one farm setting that may not be acceptable in another. Different accommodations are used in different settings. A solution that fits with the scale and production practice at one farm may be inappropriate in a different farm setting. But that doesn't mean either is disqualified for GAP certification. In fact, a successful GAP audit doesn't require earning 100% of the possible points. The audit is pass/fail based on earning a minimum of 80% of the points in each section.

HOW TO GET A GAP AUDIT



Source: Good Agricultural Practices for Small Diversified Farms: Tips and Strategies to Reduce Risk and Pass an Audit, Ben Chapman, Ph.D., Audrey Kreske, Ph.D., and Roland McReynolds, Esq. Published by Carolina Farm Stewardship Association in partnership with North Carolina State University, www.carolinafarmstewards.org. Reprinted with permission.

GAP/GHP Documentation Requirements

At first glance, the GAP audit guidance documents may seem daunting. However, many growers find as they work through the checklist, the practices required for a successful audit are already in place. What often is missing however are the required written food safety plan and documentation systems that clearly show the grower has considered their unique risks for contamination, developed prevention plans, and thought through the corrective actions to take when and if a prevention strategy does not work as planned. Within each scope of the audit, a successful score is 80%, meaning the farm has received 80% of all possible points in that section. A perfect score is obtainable. If you choose not to implement measures to gain all the points on the checklist, some

There is no one boilerplate for a food safety plan. During an audit, the farm food safety plan and its standard operating procedures will be reviewed carefully to make sure they accurately reflect the unique set of practices being used on the farm.



minimal exposure to risk is assumed. The GAP standard does not seek to eliminate all risks, but instead verifies your plan to mitigate your farm's risk.

There are no hard and fast rules for how every farm should address food safety risks. For GAP certification, the farm must consider the risks, write a plan to address them, and document that the plan is being implemented. For the purposes of an audit, no matter how good the practices are on the farm, if you haven't recorded it, you haven't done it.

All farms seeking a GAP/GHP audit must have a written food safety plan to serve as your guidelines or mission statement for food safety practices on your farm. As part of that, you will need Standard Operating Procedures (SOPs), which are the policies and procedures you and your workers will follow to meet the goals of your food safety plan.

In reviewing the USDA GAP/GHP Audit Checklist as you prepare for an audit, you will see that each checklist item has a spot for a description, a point value, and a document abbreviation, which may be blank, or have a D, P or R.

Worker Health & Hygiene

Questions		Points	Yes	NO	N/A	Doc
G-3	Potable water is available to all workers.	10				R
G-4	All employees and all visitors to the location are required to follow proper sanitation and hygiene practices.	10				P
G-5	Training on proper sanitation and hygiene practices is provided to all staff.	15				D
G-6	Employees and visitors are following good hygiene/sanitation practices.	15				
G-7	Employees who handle or package produce are washing their hands before beginning or returning to work.	15				

This excerpt of the GAP/GHP Audit Checklist shows how the information is organized.

The following indicates the kinds of documentation you will be required to provide during the audit, using the abbreviations D, P and R, as listed in the USDA GAP/GHP Audit Checklist:

D - Document

When the checklist shows “D” in the “Doc” column, it means that the farm must have a written Standard Operating Procedure (SOP) in your food safety plan that outlines your policy, and must keep records of the actions taken as specified, and provide other documents as needed to

show the food safety plan is being implemented.

P - Policy

When a “P” appears in the “Doc” column of the checklist, the food safety plan must include a written Standard Operating Procedure or policy that addresses the question specifically.

R - Record

An “R” in the “Doc” column means that the farm must keep records related to the issue, showing that actions are completed.

ON-FARM EXAMPLE



ALL FARMS REQUESTING AN AUDIT OF PART 2 - FIELD HARVEST AND FIELD PACKING ACTIVITIES, must have a documented pre-harvest assessment (GAP/GHP Audit Checklist Question 2-1), written as a policy in their SOPs and supported by records that the assessment has been done as written. The assessment should include a review for evidence of domestic or wild animal crop damage or intrusion. If the pre-harvest assessment (or other field review) indicates there is a risk from excessive rabbit intrusions into a row crop field, and that a decoy coyote is an appropriate strategy to minimize those intrusions, the placement of the decoy and monitoring for ongoing pest intrusions is recorded in a written log (R). The log will be reviewed as part of an audit under Part 1 – Farm Review (GAP/GHP Audit Checklist Questions 1-12 and 1-13). Records should show, perhaps in the form of crop maintenance reports or field review logs, that the staff is monitoring for the effectiveness of the strategy, making adjustments based on their observations, and taking corrective action whenever they find pest contamination in spite of the practice. So, for example, farm workers are trained to make sure the coyote is placed (and not, for instance, blown over in a storm), and if they find rabbit droppings on the crops, they are trained to place flags at the site of the problem. All harvest crews are trained not to harvest products within a five-foot diameter of a flag. Ideally, this staff training is also logged so that the auditor can see that it is occurring.



AUDITOR TIP



Review the audit checklist carefully as you prepare for your audit. Pay particular attention to the boxes that are shaded out. Where N/A is shaded, the question has to be answered Yes or NO.



The GAP/GHP Audit

During a GAP/GHP audit, the auditor will use the USDA GAP/GHP checklist. The review of your SOP, visual observations, and an interview process will determine the answer for each checklist question. Your food safety plan and Standard Operating Procedures (SOPs), written by you to meet the GAP standards, will form the basis for the GAP/GHP audit, and will allow the GAP auditor to verify that your plan complies with the standards. Accompanying documents and records are required in order to show that your farm is following and documenting implementation of the plan.

YOUR FOOD SAFETY PLAN

In order to pass an audit, you must have a food safety plan in place, and a written designation of the person assigned to oversee and implement the plan. Various items on the checklist require documents, records or policies, and those will be checked during the audit. Any missing documents, records or policies will result in lost points.

In order for your audit to go smoothly, and clearly convey that you meet the GAP standards, make sure your plan:

- ✦ Includes a map that accurately represents the farm, shows the number of acres, and includes a legal description.
- ✦ Identifies any secondary crop production areas located at other parcels.
- ✦ Accurately reflects your farm's operations and practices, including training practices.
- ✦ Can be implemented as written at your farm.
- ✦ Includes Standard Operating Procedures (SOPs) that define policies and procedures to be followed.
- ✦ Designates an individual to oversee the food safety program.

The operator must also:

- ✦ Determine what to document and record, based on the checklist.
- ✦ Keep records current.
- ✦ Document any corrective actions taken to show adherence to the written plan.

These documents will all be reviewed by the auditor during a GAP/GHP audit.

AUDITOR TIP



Multiple crops can be covered in a single audit. For operators of diversified farms there have been concerns that every one of their crops would have to be individually audited in order to meet the certification standard. In fact, USDA allows these farms to cover all their crops under the same audit as long as:

- ✦ All crops are declared during the initial audit.
- ✦ The food safety plan addresses the risks associated with each of the crops.
- ✦ The auditor has the opportunity to observe the growing and harvesting practices.

If some of your crops are not being harvested during the initial audit period, the auditor may need to conduct an unannounced audit to observe the harvest of additional crops, if they have different harvest practices. The auditor will call ahead to confirm it's a harvest day prior to arriving on-site to conduct an unannounced visit.

REQUESTING AN AUDIT

USDA GAP/GHP audits can be requested by calling either of the district offices of WSDA's Fruit and Vegetable Inspection Program:

- ✦ Yakima District Office: (509) 249-6900
- ✦ Wenatchee District Office: (509) 662-6161

You must request your initial audit no later than two (2) weeks before the end of your growing/harvesting/packing season. Participation in this program requires a signed Agreement for Participation in the GAP/GHP Audit Verification Program, and a completed Request for Audit Services form. Both documents can be given to the auditor at the time of the audit.

When you request an audit, you will need to provide the following information:

- ✦ Type of audit requested:
 - USDA Good Agricultural Practices & Good Handling Practices Audit
 - Produce GAPs Harmonized Audit
- ✦ Name
- ✦ Phone number
- ✦ Business information- Business name and address you wish to be listed on the USDA Certificate site
- ✦ Address of where to meet to perform the audit
- ✦ Crops you'd like to be included in the audit (ex: Beets, Cabbage, Carrots, Kale, Potatoes)
- ✦ First choice for audit date
- ✦ Second choice for audit date
- ✦ Please confirm that you will be harvesting that day: Yes/No
- ✦ For USDA Good Agricultural Practices & Good Handling Practices Audit, please indicate which scopes (sections) of the Audit are you requesting:
 - General Questions (Necessary for any GAP/GHP audit)
 - Part 1 - Farm Review (Necessary for any GAP/GHP audit)

- Part 2 - Field Harvest and Field Packing (This part is usually done in a GAP/GHP audit)
- Part 3 - House Packing Facility
- Part 4 - Storage and Transportation
- Part 5 (No longer part of audits)
- Part 6 - Wholesale Distribution/Terminal Markets
- Part 7 - Preventive Food Security Procedures

Note: The General Questions section is required for any USDA GAP/GHP Audit. Parts 1 and 2 - Farm Review and Field Harvest and Field Packing are done in most USDA GAP audits, as they cover scenarios and harvest activities that occur on all fruit and vegetable farms. Parts 3, 4, 6, and 7 are available for farms or businesses that engage in those activities. Please confirm with your buyers what parts they require so you can obtain the audit that meets their standards.

You will also be asked if this is your first audit. If so, you may also be asked the following questions to help you confirm that you are prepared for the audit:

- ✦ Have you had an audit done before? (Y/N)
- ✦ Have you reviewed the USDA Good Agricultural Practices Good Handling Practices Audit Verification Checklist? (Y/N)
- ✦ Do you have a written food safety plan with Standard Operating Procedures? (Required for the audit) (Y/N)
- ✦ Do you have policies, documents and records required in the audit checklist? (Your policies, documents and records will need to be readily available during the audit.) (Y/N)



During a GAP/GHP audit, the auditor will review your food safety plan and SOPs with you or your designated food safety representative.

DURING AN AUDIT

- ✦ Opening meeting – before beginning the audit, the auditor will review the information provided on your Request for Audit Services and explain the audit process to all participants. He or she will remind you that the audit is voluntary, confirm the sections of the audit you would like them to perform, explain costs, and describe how the audit works. During this meeting, the farm representative will fill out or give to the auditor the Agreement to Participate. This form can be downloaded ahead of time. First-time auditees will need to fill out a new account form for billing purposes. At the opening meeting, you will be provided with a copy of the audit checklist so you can follow along.
- ✦ Conducting the audit – this will include:
 - Thorough review of the Food Safety Plan, including Standard Operating Procedures, policies, documents and records.
 - Observation of processes and operation to determine adherence to your food safety plan.
 - Employee interviews.

- ✦ Auditor time to review and prepare for closing meeting – after completion of the audit itself, the auditor will take time to review findings and make clear notes to finalize the audit.
- ✦ Closing meeting – the auditor will review the audit’s findings with the grower and answer questions and explain observations. You will also be informed about how to provide feedback to USDA about the quality of service during the audit.

AUTOMATIC FAILURE

There are several ways for the audit to be deemed an automatic failure while the audit is being conducted. An automatic fail would mean the audit stops at that point, and cannot be rescheduled until the problem has been corrected. These include:

- ✦ The farm does not have a written food safety plan in place.
- ✦ There is no one designated to oversee and implement the plan.
- ✦ An auditor finds evidence of falsified records.
- ✦ Employees are not following hygienic practices that could jeopardize the safety of the product
- ✦ Excessive signs of insects or rodents.
- ✦ Any other situation that creates an immediate food safety risk.

What happens after an automatic-fail?

- ✦ The auditor will stop the audit, explain the policy, and provide the rationale for the stop.
- ✦ If the auditor feels there is an immediate food safety risk, the auditor will notify USDA. USDA will determine if further action needs to be taken.
- ✦ The farm must complete a corrective action document for the non-conformity prior to re-scheduling the audit.

AUDITOR TIP



Consider organizing your Food Safety Plan, its SOPs and your supporting documents in the order of the USDA GAP/GHP Audit Checklist. We will be working our way through a checklist, and if your documents are in that same order, it can help the audit go more smoothly and quickly, and save you money, since audits are charged by the hour.

ON-FARM EXAMPLE



SOME FARMS KEEP THEIR

LOGS and other records in binders for later auditor review. Others may post them on walls or in clipboards. You may wish to have individual logs and clipboards at their appropriate locations around the farm, and then transfer the completed log sheets and other records into binders for safekeeping and ease of auditor review.



FARMER QUESTION

Do I have to comply 100% with all the areas of the GAP audit in order to qualify for certification?

No, you do not need a 100% score. In order to have a successful GAP audit and be certified, you need 80% of the total possible points within each section of the checklist against which your farm is being audited. Each audit must start with the General Questions section of the audit checklist and you must pass this section before moving onto any other requested section of the audit.

AFTER AN AUDIT

If the audit is successful:

- The audit will be sent to USDA for approval.
- Once approved the auditee will receive a copy of the completed audit and USDA and WSDA certificates.
- The audit will be posted on the USDA web site. (Only positive information is posted on the website. No negative information is posted.)
- Unannounced visits will be done as required.
- The audit is good for one year.

If an audit fails:

- The auditor will issue a corrective action report that the auditee must complete.
- They can re-submit for the audit to be re-done. The time frame can be as short as one day or up to several weeks, depending on what caused the audit to fail.

A variety of resources are available to help you prepare for GAP implementation and audit, many of which are referenced in this manual. This is intended not to be a comprehensive guide, but to capture the many different kinds of questions producers and advocates submitted as part of our three-year Bridging the GAPs project. The stories, pictures and inquiries recorded create a snapshot of the kinds of issues small diversified farms confront, and share some low-cost ways to address those challenges.

COSTS OF AN AUDIT

As of the date of publication, WSDA bills \$75 per hour, including travel time and a charge for mileage to and from the audit site. The federal rate for audit services is \$92 per hour, per auditor, including travel time to and from the audit site and any preparation time needed to perform the audit. WSDA will change to the USDA rate in the near future.

WSDA auditors will attempt to schedule multiple audits in a single region when possible, so travel costs can be shared across several farms.

For many farms, the cost of the audit is less of a concern than the cost of staff time to prepare for the audit – from writing a food safety plan and SOPs to developing and maintaining documentation systems. This cost may be challenging to estimate and is specific to each farm. Most growers start planning for a first-time audit during the winter of the preceding year, while the fields are less busy. This guide and other resources aim to help you prepare for the audit, with a goal of reducing your time researching the standards and document requirements.

How can I estimate the cost of the audit?

Generally you should plan for the audit itself to take between two and seven hours. The length of time needed will vary depending on the size, scope, and type of audit requested. A small owner-operated farm growing one crop might take only a couple of hours, but a large diversified farm would take significantly longer. The distance an auditor is required to travel will impact the cost as well, however that is more easily projected than the length of time an auditor would need to spend on-site in order to complete the audit.

AUDITOR TIP



If you know a neighboring farm is scheduling an audit, you can coordinate with the grower to request that your audits be conducted on the same or subsequent days. The ability to conform to proposed schedules like this will depend on each farm's variety of crops, seasons, harvest schedules, and other variables.

General Questions

Implementation of a Food Safety Plan



GAP/GHP AUDIT CHECKLIST

QUESTIONS P-1 AND P-2

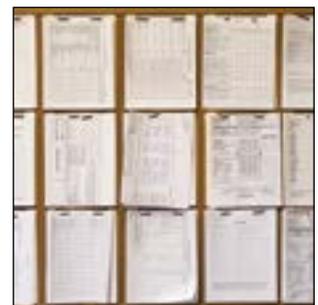
General Questions are always required as part of a GAP/GHP audit, regardless of the selected scope of the audit. A successful audit is one in which the farm being audited receives at least 80% of the points possible within each section, so getting 80% of this section is necessary before moving on to the following portions of your audit.

An audit begins with an on-site review of your written food safety plan to determine whether it meets the GAP/GHP food safety standards. The written food safety plan must include Standard Operating Procedures (SOPs), and supporting documents and records for the audit checklist questions that require them. Together, these will show that you have developed a GAP/GHP program on your farm that covers all of the scopes, or sections, of the audit you have requested, and reflects the unique operating environment at your farm.

Your farm must have a specific person designated, (in writing), to be responsible for implementation and oversight of your food safety program. The auditor will want to speak with the designated food safety representative for the farm during the audit to determine that he or she is knowledgeable and aware of all aspects of the food safety program. It makes sense that this person is the one to meet with the auditor on audit day anyway.

The audit will not go forward unless these two standards are met.

This section covers implementation of a food safety plan, traceability, and worker health and hygiene



GAP documentation can be kept in the manner that works for your farm, but must be available for easy auditor review.

Traceability and Mock Recall

You must provide evidence that your farm has a traceability plan in place, and that you have performed a successful mock recall of the product. A traceability and recall program is essential in case recall of an adulterated product is needed – whether as a result of microbial contamination, a physical contaminant, or even a product that is mislabeled.

Of course, establishing a system for identifying the source of a product will not prevent a contamination event. But it will allow you to reduce the spread of contamination from other products grown or handled in the same batch. Also, the information gathered during a traceback exercise may identify previously missed pathways for potential contamination, so that you can address them.

A traceability plan allows you to track your harvested product one step forward and one step back. That means you need to determine who you have sold it to (one step forward), and be able to determine from which production field it was harvested (one step back).

GAP/GHP AUDIT CHECKLIST

QUESTIONS G-1 AND G-2

An on-farm traceability plan will look different at each farm, but at a minimum, should:

- Capture enough information to track the product one step forward, and one step back.
- Record whether the product came from a single field or group of fields.
- Document product held in storage before packing.
- Record grower, production area, and year.
- Include the harvest date, or group of dates.
- Document any comingling of products after harvest.
- Use crop production records, farm maps, transportation bills, weight tickets, and storage records.

In a packing house, the traceability system should incorporate the following:

- Boxes packed for shipment should be identified so that the product can be traced back to the packing house.
- If the farm has several different packing facilities, the package labels must uniquely identify from which packing house the product was shipped.
- The containers must show the date of pack, which should also be linked to the farm's traceback lot numbering system.

You will need to establish a system that corresponds to your farm's production areas, harvest and packing practices, and shipping or invoice system. This information will allow you to identify any other product from the same lot that may also have been contaminated, and help you determine if, when, and how much of your product to recall.

AUDITOR TIP



The more detailed traceability information you track for your produce, the less product you may need to recall in case of a food safety concern with your produce. For instance, if you only know the harvest date, you would need to recall all product from that day's harvest. If you know the field, section, or smaller area, you would only need to recall the products that came out of that area, thus reducing loss of revenue from any incident.



ONE WASHINGTON DIVERSIFIED FARM IDENTIFIES

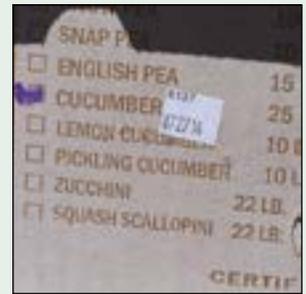
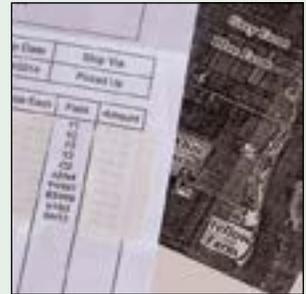
each field as a color, based on the color of buildings, gates or other identifiable features in that field. Within each field, they use numbered irrigation risers to identify field sections. So for the Blue field, the product can be traced to B1, B2, B3, etc. These numbers are kept

with the product all the way through the harvest, washing, and packing process, and are then listed on the invoice when the product is delivered. That way, if a customer has a problem or receives complaints from their customers, they can contact the farm and provide the lot number from the invoice so the farm can recall product from that very specific harvest location.

Another farm gives each planting a unique number and enters it into a searchable spreadsheet. When the product in that planting is harvested, a paper identifying the planting number is kept with the produce through washing and packing. A sticker is generated from the computer with the planting number and date and put on each delivery box. Customers can then call the farm with the planting number and date from the box if they identify a food safety concern. Then any other product from that lot can be recalled by checking the spreadsheet for other items in that lot and where they were sent.



ON-FARM EXAMPLE



RECALL PLAN

The traceability plan must include traceback and recall procedures, recall team roles with contact information, and contacts for product destinations. Ideally, the plan should have ready-to-use documents such as traceback/recall customer contact forms (stating who was called, date and time, and the purpose of the recall), crop history records, traceability logs, etc. These forms will be used to trace the origin of a product and account for all other products distributed from that same point of origin that falls under the recall scenario.

MOCK RECALL

If the audit is for Farm Review and/or Field Harvest *only*, and it's the *farm's first year requesting an audit*, then a mock recall will not be required. Otherwise, a mock recall is required for all audits. You will need to perform a mock recall every year thereafter and provide evidence that you have performed a mock recall within the 12 months prior to the audit.

A mock recall is a practice exercise to determine how well your traceability system would work in the event that you need to bring your product back from the marketplace. During a mock recall, the farm takes the steps to determine where the product was shipped and whether or not it's possible to return it to the origin or remove it from the marketing chain. When performing a "mock

recall,” you will create a scenario of a problem with a delivered product. Then follow the traceability and recall plan, tracking date and time of contact. The mock recall should reconcile as close to 100% of all affected product as possible. Make copies of all supporting materials to show how reconciliation occurred. **BE SURE TO WRITE OR STAMP THE PHRASE, “MOCK RECALL,” ACROSS ALL COPIES OF SUPPORTING MATERIALS.**

MOCK RECALL EXAMPLE

A customer notifies your farm that there is evidence of motor oil on 10 boxes of lettuce they received from you yesterday. In a mock recall you will trace the product back using the lot number provided by the buyer, to determine:

- Date of harvest - to help determine soil applications, machinery used in the field, and other specifics of the day’s work.
- Any further processing of the product, such as washing, or packing in order to identify potential contact with the contaminant.
- Potential sources for the oil – machinery, adjacent land use, packing area, transportation, storage.
- Whether other crops at your farm are impacted.
- Whether impacted product was sold to other buyers.
- Whether, when, and how to recall your product.

The auditor will review the written traceability and recall plan, along with your mock recall records and will evaluate how effective the plan is likely to be given the operating environment on the farm and the data and information you were able to gather from the lot numbers provided by the theoretical “buyer” in your mock recall.

RECALL PLAN CHECKLIST

- ✦ Create a Customer/Buyer Contact list. Be sure to update names, phone numbers, and emails annually or as needed.
 - Restaurants or buying club distributors: Two contacts in purchasing/shipping department.
 - Your own CSA: All members by email or website.
 - Farmer’s Market/Roadside stand: Website for customers to look for information, email sign up sheet, signs posted at the market or roadside stand.
- ✦ Create a Recall Contact list. This list should include names and phone numbers of media representatives, proper authorities (FDA, NCDA&CS, etc.), your insurance company and your legal counsel.
- ✦ Identify the problem (chemical, physical or microbial risks) and assess the health risks.
- ✦ Determine the products and lot numbers involved. (Only strawberries, or one day’s worth of all vegetables, etc.)
- ✦ Determine quantities involved. (cases, boxes, etc.)
- ✦ Determine current inventory on the premises.
- ✦ Determine the amount of product in the marketplace.
- ✦ Identify the customers/buyers who have received the product.
- ✦ Collect pertinent documentation regarding the affected product.
 - Inputs and outputs of affected field associated with the lot number such as notes on flooding, wildlife activity, an ill employee, manure application, etc.
- ✦ You will need to determine:
 - the total amount of suspect product shipped/delivered.
 - the total amount of suspect product still in the buyer’s procession.
 - the total amount of suspect product the buyer has shipped
 - any product discarded
- ✦ Upon completion of the mock recall, outline any issues in the recall plan and how you should change the recall plan to make it better. For example, taking longer than 2 hours and not being able to account for 100% of the product.

Source: Good Agricultural Practices for Small Diversified Farms: Tips and Strategies to Reduce Risk and Pass an Audit, Ben Chapman, Ph.D., Audrey Kreske, Ph.D., and Roland McReynolds, Esq. Published by Carolina Farm Stewardship Association in partnership with North Carolina State University, www.carolinafarmstewards.org. Reprinted with permission.

Worker Health and Hygiene

Employees and visitors can be effective vectors for transmission of microbial contamination from people to equipment or product, and then onto consumers. Operators must understand how to minimize risks, communicate those policies, and verify that the practices are followed.

GAP/GHP AUDIT CHECKLIST

QUESTIONS G-3
THROUGH G-15

GAP/GHP AUDIT CHECKLIST POTABLE WATER

QUESTION G-3

Potable water must be available to all workers for drinking and hand-washing in order to decrease the risk of microbial contamination. The audit will require you to present documentation that shows the water available for these uses is potable. All municipal water is potable (by law), and records should be available to you through your municipality. Well water may be potable, but will need to be tested for potability by a qualified lab. Surface water should be assumed to be non-potable, but can be tested and treated in order to reach that standard.

WORKER AND VISITOR TRAINING AND PRACTICE

All workers and visitors to the farm or farm stand must know and follow proper sanitation and hygiene practices.

Staff must be trained on proper sanitation and hygiene. Also documentation must be kept demonstrating that this policy is regularly reinforced and employees are evaluated to determine whether refreshers or follow-up training are required to ensure compliance. While on-site, the auditor will observe the hygiene and sanitation practices of employees and visitors as a measure of how well the food safety plan's worker health and hygiene policies are being implemented.

GAP/GHP AUDIT CHECKLIST

QUESTIONS G-4
THROUGH G-6

BELOW IS THE WORKER SANITATION HYGIENE SECTION

of a Field Harvest Policy used by a diversified farm in the Yakima Valley. Each farm will have modifications that reflect their on-site practices, but this may be a useful starting place as it covers the key components of worker health and hygiene.

- ✦ Hands are to be washed and sanitized before commencing work and break, also after break and when work is completed.
- ✦ No children or infants are allowed in the fields.
- ✦ No animals are allowed.
- ✦ No food within 20 feet of the product field.
- ✦ No drugs, alcohol or tobacco use:
 - Use of any of these substances in the product field will be terminated immediately.
- ✦ No jewelry or clothing with little rocks is to be worn during harvest or general field work.
- ✦ Harvesters are not permitted to use cell phones unless:
 - Emergency
 - Call foremen or managers to notify of possible food safety risk



ON-FARM
EXAMPLE

HANDWASHING

Of particular importance is the practice of handwashing prior to beginning work, or after breaks or bathroom use. Employees returning to work after bathroom use must wash their hands thoroughly in order to minimize the risk of transmitting diseases harbored in human intestinal tracts. The farm should post signs to remind employees about handwashing, and those signs should be readily understandable, which may require accommodation for native languages other than English. The dominant native language spoken is the one in which the farm will be required to provide signs. Otherwise, for additional languages, graphic depictions of the instruction are sufficient. **If workers who handle produce are seen returning to work without washing their hands, and no work lead takes immediate corrective action, then the auditor will stop the audit and it will be considered an automatic unsatisfactory.**

QUESTIONS G-7
AND G-8

If my hand-wash station is outdoors, do I need to collect the water and discard it?

Water should not run freely on the ground as workers' shoes and boots can track bacteria into storage areas or any adjacent packing or production areas. A gravel drainage pad may work, as long as it has capacity to soak up the water without creating pooling. If you need to catch the waste water and dump it, the dumping area should be away from the production or packing area and not a source of contamination to the irrigation water. The waste water should be dumped in an area that workers and visitors do not walk through when coming to and from the field or packing area.



The auditor will check that signage indicating handwashing requirements and locations of sanitation facilities are clearly posted, and that restrooms and field sanitation facilities are cleaned and properly maintained.

ON-FARM EXAMPLE



HANDWASHING STATIONS MAY VARY

from rudimentary to full-service bathroom sinks, but they must all have the required basic components:

- potable water
- single-use towels
- toilet paper
- hand soap.
- trash can with a lid



RESTROOMS AND FIELD SANITATION UNITS

GAP/GHP AUDIT CHECKLIST

QUESTIONS G-9 AND G-10

Field sanitation units and restrooms should be maintained on a regular cleaning schedule and supplied with pump hand soap, single-use towels and potable water for handwashing. Good practices include making sure that handwashing water is prevented from pooling, which would create a risk for tracking contaminants into the production fields. Single-use towels should be discarded in a foot pedal-controlled, lidded trash bin.



Field sanitation units must include adequate handwashing facilities, whether they are in the field, or by the packing house.

DESIGNATED EATING AND SMOKING AREAS

QUESTION G-11

Field harvest areas and packing houses must indicate with signage and through employee training which areas of the facility are designated for smoking and eating. Also, smoking and eating must be excluded from produce handling. For field harvest workers, this may mean that they are at the edges of fields or in the driveway areas away from the crops. Bottled water is an exception and is allowed in the work areas as long as it is in closed plastic containers away from the work area when not being used. The auditor will review work sites and will not award the points for this section if they see any other eating, drinking, smoking or the presence of food or tobacco in a food-handling area.



Designated areas for eating and drinking may be outside, by the side of the field, or in a room in a packing house or office.

PATHOGENS OFTEN TRANSMITTED BY FOOD CONTAMINATED BY INFECTED EMPLOYEES

Pathogen	Symptoms
Hepatitis A virus	Fever, jaundice, vomiting
Salmonella species	Nausea, vomiting, diarrhea, fever
Shigella species	Diarrhea, fever, cramps
E. coli 0157:H7	Severe abdominal pain, watery diarrhea, vomiting
Staphylococcus aureus	Diarrhea, nausea, vomiting
Streptococcus pyogenes	Fever, Sore throat with fever

Reprinted with permission from Plant & Pest Advisory, Rutgers Cooperative Extension, New Jersey Agricultural Experiment Station

WORKER HEALTH

QUESTIONS

G-12 THROUGH G-14

Sick workers are vectors for food-borne illness.

Farm owners and operators should train staff to identify when they are sick, and either stay home or be temporarily assigned to jobs that do not put them in direct or indirect contact with produce. Managers and supervisors should be familiar with the symptoms of diarrheal disease and other infectious diseases. Other visible signs which should be cause for concern and action on the part of employee or supervisor are open lesions such as boils, sores or infected wounds, or any abnormal source of microbial contamination which could come in contact with food or food contact surfaces. The auditor may ask questions of the supervisor in order to determine their awareness and ability to recognize a sick or injured worker that should be reassigned away from direct or indirect contact with fresh produce.

The farm must also consider the possibility of fresh produce coming into contact with blood or other bodily fluids. The food safety plan should include a policy on how the produce will be handled and disposed of, and how the food contact surfaces will be cleaned and sanitized in the event of contact with bodily fluids.

If a worker has any kind of cut, lesion, or on-the-job injury he or she must get first aid before continuing to work. Even a small cut or scratch must be covered in order to prevent potential contamination of the product. Workers should be trained to report the injury, get first aid, and seek guidance on whether they are able to return to work with produce, or whether they need to be reassigned to a role that does not require direct or indirect contact with fresh produce.

PERSONNEL APPLYING PRE- HARVEST OR POST-HARVEST MATERIALS

QUESTION G-15

If the farm uses pre-harvest materials such as fertilizers or pesticides, or post-harvest materials such as waxes or fungicides, employees must have a working knowledge of their safe, appropriate use. The auditor will review training records, interview employees, or (in the case of restricted use materials) review the federal or state applicator licenses held by the staff using, or supervising the use of, the materials.

AUDITOR TIP

During an audit, the auditor should be treated just like any other visitor, so if a visitor is required to use the handwashing station and sign in, then the auditor should be required to do the same.



VISITORS ON THE FARM

QUESTIONS
G-4 AND G-6

Your SOP should contain your policies and procedures for having visitors on the farm. These may be as simple or complex as needed for the type of farm you are running and how many and what types of visitors are expected.



Clearly marking areas which are public (to the right of the rope line) and areas which are reserved for the packing process is a good practice to ensure farm stand visitors do not create potential food safety problems.

RULES FOR VISITORS SHOULD INCLUDE:

- ✦ Handwashing with soap and water is required before entering fields and after using the restrooms.
- ✦ No smoking or eating, except in designated areas.
- ✦ No pets allowed on the farm or in the fields.
- ✦ All u-pick buckets or harvest containers clean and sanitized before entering fields. (One farm in Washington provides sanitized buckets for picking, and visitors transfer the produce into their own containers to take home.)
- ✦ If you have other policies or procedures in your SOP, they must apply to everyone, (including visitors), unless otherwise noted.

BEST PRACTICE EXAMPLES FOR HAVING VISITORS ON THE FARM:

- ✦ Have all visitors enter through one farm entrance, where they must pass a sign with the rules posted, and have staff stationed there during potentially busy hours (such as u-pick hours or during events) to ensure that visitors follow the rules. You may also require visitors to sign in, and review a food safety rules list. Some farms have required visitors to watch a short video about food safety measures on the farm, including the visitor rules.
- ✦ In order to ensure that visitors are following the rules, farm staff should observe visitors throughout the day. If any appear to be breaking the rules, staff should remind them and require them to follow the posted and stated farm rules for food safety.
- ✦ Handwashing facilities and restrooms should be provided in an easily accessible location. Remember to consider the likely volume of use and be sure that portable toilets are serviced frequently and that water from outdoor handwashing facilities is adequately drained to keep water from pooling or creating a situation where foot traffic can spread any contaminants in the water.

Part 1

Farm Review



Farmer and auditor visit the field to review farming practices.

The Farm Review covers all of the activities and operations undertaken at the farm, and the auditor will personally review each production area. A passing score in General Questions is required in order for the Farm Review to proceed.

Farm Map

The best way to start planning for food safety is to map your farm. While a farm map is not listed as a requirement in the checklist, the auditor will ask to review a map or diagram of your farm. The topography of the farm and the various functions that make up the operation will influence the kinds of prevention practices you'll develop, implement, train employees on, and document. The map or diagram should indicate where potential contaminants like livestock and manure are relative to crops, and show streams and waterways, hills and valleys, fences and other natural barriers.

This section includes water usage, sewage treatment, animal/wildlife/livestock risks, manure and municipal biosolids, soils, traceability, and land use history.



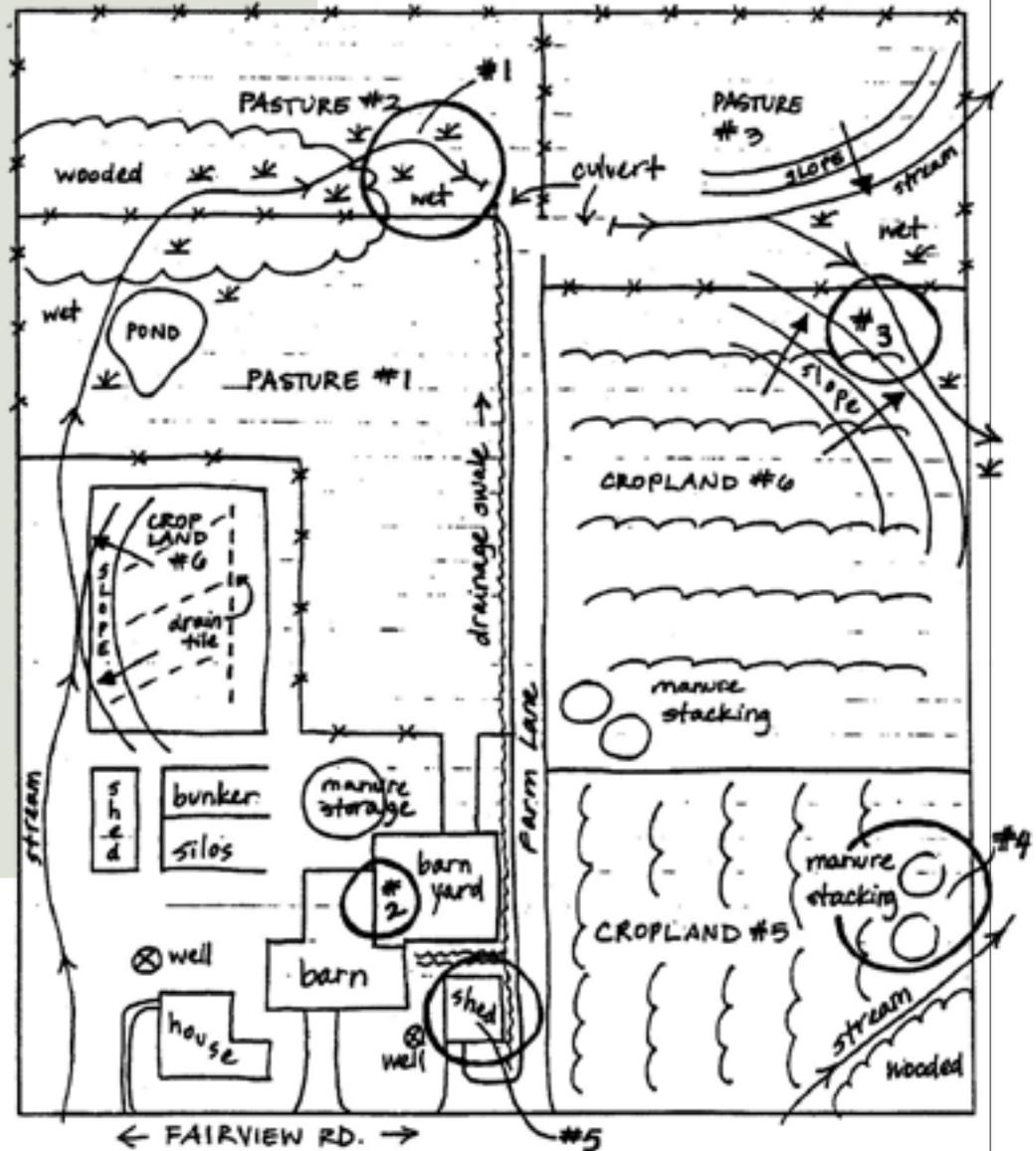
A FARM DIAGRAM SHOULD INCLUDE:

- Cardinal directions; north, south, east, west
- Crop production fields
- Numbering system for fields (for use in your traceability system)
- Livestock barn locations and pens
- Animal waste storage/compost areas
- Buildings
- Greenhouses and high tunnels
- Hedgerows
- Fences
- Wells, ponds, and surface water sources such as canals
- Irrigation pumps
- Irrigation pipes (underground and above ground)
- Valves, gates, reservoirs, returns
- Septic systems
- Roads, driveways
- Topographic features
- Wetlands

It may also include the affects of:

- Heavy rainfall
- Flooding
- Wind
- Wildlife or domestic animal intrusion
- Adjacent land uses

Remember to note slopes and types of topography as shown in this map with arrows and notes. This will help you consider drainage and potential runoff issues. Numbered circles are a useful way to visually note the known or potential problems. You may also create a more detailed document that is coded to correspond with the numbered circles, and will describe your risk assessment and plans for preventing contamination.

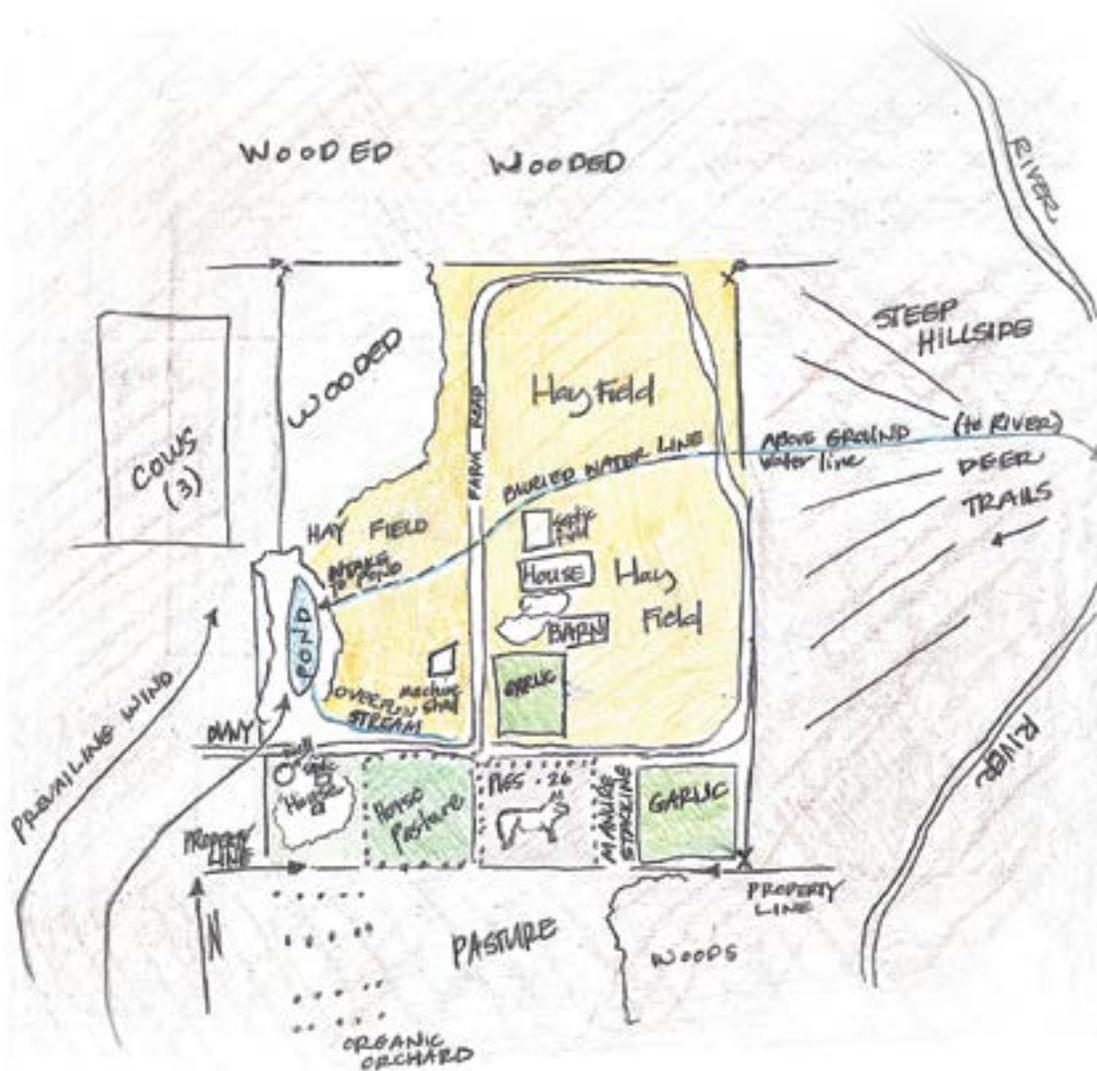


Sample Farm Map reprinted with permission from: Animal Waste Management, Rutgers Cooperative Extension, New Jersey Agricultural Experiment Station

A hand-drawn map can be as simple as this map of a small Washington farm, and still represent the important features present on your farm. Regardless of the way you choose to map your farm, make sure it is useful to you in predicting sources of potential contamination, and that an auditor would be able to read it easily and understand the ways the diagrammed items inform your food safety plan and SOPs.



Satellite imagery of the same farm using Maps.google.com



Water Usage

QUESTIONS 1-1
THROUGH 1-5

The GAP Farm Review checklist starts with water usage questions about all water used on crops in the field. This includes water used for irrigation, as part of cooling and frost-control, and in chemical applications (e.g., fertilizers).

Water can be a carrier of many microorganisms, including pathogens that cause illness. Under certain circumstances even small amounts of contaminated water that has come in contact with fresh produce can result in food-borne illness. The risk of water with some level of microbial contamination damaging your saleable product will depend in part on the following:

- ❖ The crop — Does it have a large surface area or a rough texture that naturally holds onto water? Does it sit on the ground or under-

ground, or is it grown well above the ground where drip irrigation water may not come in contact with it?

- ❖ The method of water delivery – Overhead irrigation comes in direct contact with edible portions of your crop, whereas drip irrigation largely keeps water away from the product by delivering the water directly onto soil.
- ❖ The timing of the application - How close to harvest is the water applied?

Your water risk assessment will include water testing, analysis of the findings, and careful consideration of the crops, irrigation and other water uses, to determine what practices or changes to your system may be necessary to mitigate risk of microbial contamination.



Generally, water that will be in contact with the edible portion of the crop should be better quality than water that is used where there is minimal contact with the edible portion.

WATER TESTING

Your planning starts with an assessment of your water quality to determine the kind and frequency of water testing needed, whether your water source is appropriate for pre-harvest application, and how it will affect your water usage practices. The assessment will include reviews of water quality testing conducted by your local irrigation district or municipality, or farm-specific tests ordered on your wells or surface water.

Generic *E. coli* is the standard test for irrigation water. *Escherichia coli* is a common bacteria that lives in the lower intestines of animals (including humans) and is generally not harmful. It is frequently used as a marker for water contamination. Soil and water tests will often show some level of the presence of generic *E. coli*. Thresholds of acceptable levels of *E. coli* will vary, depending on each farm's unique practices.

Testing regimes vary based the water source and the way it is used in your farm. The following are general rules for municipal water, well water and surface water testing regimes.

If Your Farm's Water Is	Risk	Test	Documentation
City water/municipal	Low	Not generally required. May want to test at your outflow however, especially if your on-site system is old, recently modified or potentially compromised.	A copy of the water quality report from the supplying municipality is sufficient.
Well water and springs	Medium	Annual test for generic e-coli for irrigation. (For produce wash water, which must be potable and have no presence of fecal <i>E-coli</i> , you would need to test specifically for fecal <i>e-coli</i> .)	Annual test report from a recognized lab is required. The report must include a concentration measurement of the amount of generic e-coli, rather than simply presence/absence of the contaminant. A presence/absence reading will not be acceptable in audit.
Surface water (ponds, streams, rivers, lakes) – includes irrigation districts that are open ditches or do not conduct regular testing	High	Test for generic e-coli for irrigation water. Test 3x/year: <ul style="list-style-type: none"> • Start of season • Peak use • Prior to harvest If using an irrigation district water source, the district water test is acceptable. (Test for fecal <i>e-coli</i> if considering use of the water for produce wash water.)	All three test reports are required. The reports must include a concentration measurement of the amount of generic e-coli, rather than simply presence/absence of the contaminant. A presence/absence reading will not be acceptable in audit. If using an irrigation district report, a copy is required at time of audit.

HOW TO TAKE A WATER SAMPLE

BEFORE SAMPLING YOUR WATER SUPPLY

- ✦ Contact your selected laboratory prior to collecting the sample to confirm the following:
 - Sample delivery times
 - Collecting instructions
 - Pricing per sample
 - Testing methods available
- ✦ Collect samples in sterile containers provided by the testing laboratory.
- ✦ Do not rinse your sample bottles prior to taking samples.
- ✦ If more than one sample is to be tested, all samples should be collected within a continuous 18 hour period.
- ✦ Always take extra bottles and sample request forms from the testing lab.

One of the tests recommended is the Colilert® method (Generic E. coli and coliforms) with quantitative results (not presence/absence). If funds are low, a single sample at the point of use is recommended to account for the entire irrigation system. If funds are available or you plan on participating in a cost share program, one sample should be taken from the water source (wellhead, surface water, etc) and from the point of use (end point) for irrigation and wash water. Your results will be representative of the water quality throughout your system. You will be able to identify if your water is becoming contaminated through your system, either in irrigation lines or at the wash station. If you do find an unacceptable level of contamination, you can isolate it either to the water source (i.e. cracked well casing, inflow from above due to faulty well seal, contaminated runoff, wildlife contamination, etc.) or to the above-ground (i.e. irrigation or wash station) system.

WATER SAMPLING PROCEDURES

Irrigation water samples	Run the irrigation system for the amount of time needed to flush the 'hold up' volume of the system plus an additional 5-10 minutes. Collect samples from the sprinkler/drip system (not the intake area).
Post Harvest Water	When collecting samples from the distribution system tap make sure to remove any attachments, such as aerators. Open the tap fully and allow the system to run for at least 10 minutes (or the time to flush out the 'hold up' volume) before the sample is taken. Slowly fill the container to the line as indicated and tightly cap the container.
Transportation	The sample should be delivered to the laboratory as soon as possible, and no longer than 24 hours after its collection. Samples should be placed in a cooler with ice or gel packs during transportation. Check with specific lab for any additional procedures.

Source: Good Agricultural Practices for Small Diversified Farms: Tips and Strategies to Reduce Risk and Pass an Audit, Ben Chapman, Ph.D., Audrey Kreske, Ph.D., and Roland McReynolds, Esq. Published by Carolina Farm Stewardship Association in partnership with North Carolina State University, www.carolinafarmstewards.org. Reprinted with permission.

This farm's pumping and pressurizing equipment is secured by fencing, and the area surrounding it is kept free of contaminants like trash and debris. The water source is an open canal, and thus exposed to airborne and other contaminants. The water is tested regularly, and is pressurized and delivered via drip tape exclusively, so the water does not touch edible portions of the food.



MAKING DECISIONS BASED ON WATER TEST RESULTS

The USDA GAP standard does not include a set level of acceptable microbial contamination for irrigation water, but instead relies on farmer analysis and decision making based on the range of practices and situations on that farm.

Each farm will have different risk scenarios early, mid and late-season, especially if more than one source of water is used. The type of crop, as well as the water delivery method, will be key components in a risk assessment. Acceptable microbial contamination levels for irrigation water vary depending on the farm's risk profile: again, the type of crop, the way the crop is irrigated and how close to harvest the water is applied.

ON-FARM EXAMPLE



DIFFERENT CROPS CAN TOLERATE WATER WITH VARYING LEVELS of microbial contamination while still minimizing food safety risks. The kind of

irrigation used will be a key consideration. For example, overhead sprinklers put water directly onto the edible portion of the plant, whereas drip tape puts the water into the soil, minimizing the potential for contact with the product. Fresh and fresh-cut lettuce and leafy greens products, which are nearly always eaten raw, are often hand-harvested, and have large surface areas to absorb water, are treated as having a higher risk for contamination from pre- and post-harvest water. Therefore, the tolerances for this type of crop tend to be lower.

The California Leafy Greens Marketing Agreement (LGMA) is a voluntary food safety membership organization, whose members are mandated to have USDA-certified food safety audits. The food safety practices followed by member organizations are adapted to be commodity-specific, but are based on the core elements of Good Agricultural Practices.

The following acceptable e-coli readings for pre- and post-harvest water applications are the microbial contamination levels adopted by their organization, and are just one example of standards. Leafy greens are considered higher risk because they grown directly in the ground (as opposed to a trellised crop or tree fruit), and are generally eaten raw. These may be more restrictive than required by other crops.

The California Leafy Greens Marketing Agreement standards for water quality

- Pre-harvest foliar applications (edible portions of the crop are contacted by water)
- ≤ 126 MPN/100 mL (rolling geometric mean $n=5$) and ≤ 235 CFU/100 mL for any single sample
- Pre-harvest non-foliar applications (edible portion of the crop are not contacted by the water)
- ≤ 126 MPN/100 mL (rolling geometric mean $n=5$) and ≤ 576 CFU/100 mL for any single sample
- Post-harvest direct contact applications (re-hydration, core in field, harvest equipment cleaning, bin cleaning, product cooling, product washing)
- Negative or below (detectable level) DL/100 mL

Water testing is not the only method of assessing water quality. You may find potential sources of contamination during a pre-harvest walk-through, or in the course of regular review of farm practices.

Surface water has the highest risk of contamination – risks include everything from airborne contaminants like dust and chicken feathers, to migratory birds and other wildlife. Consider and reduce the risk of contamination of surface waters by keeping the pumping equipment and filters in good repair, and monitoring the sources for accumulations of culls, trash or debris, and signs of pests or wildlife impact. Maintain effective barriers like fences and hedgerows so that wild and domestic animals do not have access to irrigation water sources directly. Be sure to consider potential runoff issues into the water source from adjacent land, especially livestock farms, composting activity or any septic or sewage systems.

Irrigation methods can contribute to or mitigate contamination from source water. If used in sprays or for overhead irrigation, depending on when in the life cycle of the plant it is applied, irrigation water can introduce pathogens to the edible portion of the plant. In addition to assuring that the farm's water quality is appropriate for the crop it's applied to, you may wish to consider drip irrigation or other methods that are designed to prevent water from having direct contact with the crop. Drip irrigation can decrease the risk of microbial contamination because the water is applied to the soil rather than onto the plant. However, using drip tape does not take the place of regular testing regimes as described in this manual and in other resources referenced.



In situations where well water is tested and meets potability standards, overhead irrigation is unlikely to transmit microbial contamination to the crops, even when it comes in contact with the edible portion of the plant.



If I have a pond that serves as a watering hole for my livestock, can I use that water for irrigation?

No, you cannot use the same source of water as both watering hole for livestock and irrigation for food crops. Irrigation water must be protected from contact with livestock.

**FARMER
QUESTION**

Your farm's SOPs should specify the steps to be taken should your water test results indicate levels of unacceptably high levels of microbial contamination (interpreted on the basis of the crop grown, or the way the water is being delivered and applied) or if you identify other sources of contamination. Those steps must be documented, and the results recorded. For example:

- ✦ Stop using that water source.
- ✦ Investigate the source of the problem. Your farm map and initial risk assessment will help determine the potential sources of contamination.
 - Is this a systemic problem such as upstream contamination or seasonal changes in the water quality?
 - Is this a one-time contamination event? You should inspect for: cracks in the well structures including the well head, casing and seal; signs of animal contamination; possible contaminated run-off from heavy rainfall or flooding; contamination from an on-site or adjacent property septic or compost storage system.
- ✦ Implement mitigation strategies based on your SOPs.
 - If systemic or out of your control, consider adjusting irrigation methods, chemically treating your water, or changing the source of your water.
 - If a one-time contamination event, consider adjusting equipment or otherwise removing the source of contamination. Make sure to record the steps taken in your written log.
- ✦ Re-test the water prior to resuming usage. You will need to show the auditor the results of tests after the contamination event, or concerning water test results, with evidence that the mitigation strategy was effective and the water is microbially safe for the crop, delivery method and usage.



If necessary, irrigation water can go through a filter step to make it microbially safe for its intended use. In some systems, there is also the option to add an antimicrobial solution to the irrigation water before it is used on crops. The antimicrobial solution must be identified for use on fruit and vegetables and the amount used must be documented and monitored to show it meets label directions.

Sewage Treatment

The farm's septic or sewage treatment system must be documented to be functioning properly. Also, no municipal or commercial landfill or sewage treatment plant should be adjacent to the farm.

If your farm has housing or a shop with indoor plumbing, your risk assessment map should include the buildings and clearly indicate where the drain field and septic tank are located. The auditor will ask to see the map to determine its proximity to the farming location and whether it may pose a potential risk. The auditor will look at the location of the drain field and septic tank for any signs of leaking or any surface discharge.

GAP/GHP AUDIT CHECKLIST

QUESTIONS 1-6
AND 1-7

Animals/Wildlife/Livestock

Animals can play important roles on farms. Domestic cats and birds of prey can be beneficial in controlling rodent populations. Grazing animals can be excellent sources of fertility. Even

GAP/GHP AUDIT CHECKLIST

QUESTIONS 1-8
THROUGH 1-13

with good planning and monitoring of exclusion strategies, a farm will never realistically be 100% free of impact from

wild animals such as migratory birds, deer, and elk. However, animal waste in soil or irrigation water can represent a food safety risk. Growers must take appropriate risk assessment and prevention steps to exclude animals from crop production areas and have mitigation plans in order to comply with GAP standards.

LIVESTOCK AND POULTRY ADJACENT TO GROWING AREAS

Creating and maintaining adequate protection from animal contaminants on adjacent lands or from sources on your own farm is essential. Your crop production fields should be located at a safe distance from sources of animal contamination such as dairy, livestock or fowl production facilities, or manure lagoons. When planning where to locate animals and production areas, consider potential runoff issues and prevailing winds that could blow dust or feathers onto crops, and how heavy rains or dry dusty winds may affect these. Berms, tree rows, and other barriers can reduce runoff and airborne animal contaminants. A careful farm review will identify whether or not barriers are needed and what distances are appropriate. Your risk analysis should consider the consequences of a flood event, or a leaking manure lagoon on your crop production fields, and the corrective actions to take should this kind of contamination occur.



Livestock are an integral part of many farms. Determining the best site for animal areas in relationship to crop areas requires consideration of topography and winds that may create food safety hazards.

INTENTIONAL INTERACTION BETWEEN LIVESTOCK AND PRODUCTION FIELDS

Diversified farms that include livestock often have natural fertility in the form of animal manure. They may use a system of moveable pens to allow livestock or poultry to graze in rotation with crops across seasons, or have sheep, goats, or pigs clean up a field or tree fruit orchard after harvest. The fertility is useful, and the animals can forage for un-harvested product, as well as feed on the remaining grasses and weeds.

When given enough waiting time on a field, this can be part of a sustainable system that minimizes the need to buy commercial fertilizer. Managing raw and composted manure properly is a key component of an auditable food safety plan. Growers must observe appropriate waiting periods from the presence of the animals in the fields to the time for workers to re-enter, raw manure to be incorporated into the soil (minimum 2 weeks) before planting, and harvest to be done (not less than 120 days from when animals were removed and raw manure stopped being deposited on the field). The SOPs should also address preventing animal droppings on the ground from contaminating equipment or being transferred out of the field through foot traffic.

Farms that use livestock as work animals, such as draft horses, oxen, or mules, will need to address possible sources of contamination and have a plan and documentation of remediation steps.

ANIMAL DISTURBANCES

It is impossible to entirely exclude animals, wild or domestic, from your fields, but the GAP standard requires that farms evaluate their risks for animal contamination and act to lessen risk where signs of animal intrusion are found. Each farm will need to do an analysis of the likelihood of intrusion from different kinds of animals, plan for reducing the risk, and monitor the fields for evidence of intrusion. Your SOPs will detail how to watch for signs of animal intrusions such as game trails, crop damage, or feces, and what corrective actions to take when signs are found.

Note: food crops with evidence of animal urine or feces must not be harvested.

An important strategy for minimizing the risk of animal intrusions is to eliminate attractions such as cull piles, standing water and nesting materials. You can also use techniques such as noise cannons, reflective tape and well-built fences without destroying any wildlife habitat around the farm. Before taking steps to remove habitat, check with your regional Conservation District for suggestions on appropriate habitat management strategies.

ON-FARM EXAMPLE



A SIMPLE WAY TO INDICATE THAT PRODUCT

must not be harvested due to contamination is to place flags at the contaminated area. One Washington farm in a river valley has experienced an increasing problem with elk and beavers. Their SOP indicates that any product with visible contamination is to be flagged, and the crops within a five-foot radius of the flag will not be harvested. Workers are trained to place the flags upon seeing evidence of animal contamination, and harvesters are trained to leave crops unharvested within a five foot radius when they encounter flags in the field. This past year, the farm manager noted that some of their romaine lettuce had the tops chewed off. Initially, she put in flags to mark the chewed plants, and advised workers (per their training), not to harvest there. Eventually, the problem became widespread enough that she chose to mark an entire section of the field as unharvestable, and advised workers not to enter that field. Kale fields in the same area were being raided by beavers from the nearby river, and the decision was made to flag that area, as well.



For the audit you will be asked to show records of the monitoring activities you've determined are necessary to prevent wildlife or domestic animal intrusion, as well as records showing that you're implementing the strategies.

AVOIDING CROSS-CONTAMINATION FROM ANIMALS

When farm workers regularly work with both animals and produce, best practice is to have a system to clean and sanitize boots between uses, or to have two pairs of boots. This must be in your



One farmer identified his short boots as his “animal boots” and his tall ones as his “vegetable boots,” and was careful to change them when switching tasks.

SOPs, and be included in worker training. Both the policy and the training must be documented, and the auditor will look to see if workers are following the designated practice.

ON-FARM EXAMPLE



ELK OR DEER FENCES MAY BE A USEFUL STRATEGY for animal exclusion for small orchards and farms, but are not required and may not be feasible on larger farms.

In the Yakima Valley, farms located near wooded areas or nearby rivers or creeks have much greater exposure to intrusion from deer. The farms situated in fields that are in open, flat stretches of the valley are naturally less attractive to deer because there is little water and very little protection from predators. In these areas, investing in building and maintaining deer fencing doesn't make sense. In the upper part of the valley, which is planted with more orchards and thus has more natural cover, deer are a significant problem and the orchards are almost all deer-fenced (though not as a food safety precaution, but rather to protect their harvest). Operators of row crop farms in those areas can take a cue from their neighboring orchardists and monitor carefully for evidence of deer intrusions in their production fields.



A farm has a large rabbit population, and has placed two-dimensional wooden cutout decoy coyotes in the field to scare off the rabbits.

Manure and Municipal Biosolids

Farms with integrated livestock production will naturally have a source of some quantity of raw manure. Other farms may buy raw manure from nearby dairies or other livestock operations. This animal waste can be part of a farm’s fertility management program, and used as a soil amendment either in its raw form, or after composting it according to established guidelines to bring pathogen concentrations to a safe level. In the GAP audit standards for manure and municipal biosolids, farm practices are different depending on the uses. The following categories will determine which audit checklist items apply to your farm:

Option A: Raw manure or a combination of raw and composted manure is used as a soil amendment.

Option B: Only composted manure and/or treated biosolids are used as a soil amendment.

Option C: No manure or municipal biosolids of any kind are used.

OPTION A

Choose this option if your farm’s soil amendments include any raw manure, whether alone or in combination with treated manure. If you choose this option, do not address sections 1-18 through 1-22.

CHECKLIST QUESTIONS
1-14 THROUGH 1-17

GAP standards specify a waiting period of a minimum of two weeks for planting into a field where raw manure has been incorporated into the soil. Raw manure cannot be applied to crops that will be harvested less than 120 days from the date of the manure application. If the 120-day waiting period is not feasible for whatever reason, you should only use composted manure. Composted manure must be treated appropriately to reduce pathogen levels. You must also evaluate your manure storage system to minimize the risk of contaminating crop production areas resulting from heavy rainfall, flooding, containment-system

failure or other scenarios that would release manure from its storage area.

Your SOPs must contain your written policies and procedures for use of manure and compost. Good records showing dates of application, planting and harvest must be available for auditor review.

Note that the National Organic Program standards, which guide WSDA’s certified organic program and certification, provide standards for the use of raw and composted manure, but that they specifically prohibit the use of biosolids. For additional information on how GAP certification standards relate to organic certification standards, refer to The WSDA Organic Program fact sheet, included in the Resource Section following the GAP/GHP Audit Chapter of this guide.

OPTION B

Choose this option if your farm uses only

composted manure or treated biosolids as soil amendments. If you choose this option, do not address sections 1-14 through 1-17, or 1-22.

CHECKLIST QUESTIONS
1-18 THROUGH 1-21

Your SOPs should clearly state that only properly composted manure or biosolids will be applied as soil amendments. The auditor will review your compost application records to verify that only composted manure or biosolids are used. If records show that any raw manure is used, the auditor will use the questions for Option A.

If you’re composting the manure yourself, you will need to develop and be able to show the auditor your documented composting process. Commercial compost that is purchased for use on the farm must also have documentation of the compost process and test results showing that pathogens of concern have been effectively controlled.



If you are storing composted manure or treated biosolids for future use, they must be stored in a way that reduces risk of contamination to growing areas or recontamination of the compost itself. Even fully composted manure may still contain some pathogens. Barriers or containment systems such as concrete block containers or soil berms can reduce risk of runoff, leaching or wind depositing contaminants onto crop areas. Open outdoor compost piles should be at a reasonable distance and situated downhill from growing areas so runoff goes away from growing areas. Consider whether heavy rains can result in excessive leachate, and decide whether covering your manure piles is necessary, or whether you wish to collect the leachate for disposal. Leachate or manure tea may be used on crops, but should be handled using good agricultural practices that maximize time between application and harvest.

OPTION C

Choose this option if your farm applies no manure or biosolids at all.

CHECKLIST QUESTION
1-22

If the farm does not apply raw or composted manure or biosolids to soils, then having a written policy to that effect included in the Food Safety Plan is sufficient to meet the GAP requirements for Manure and Municipal Biosolids.

Soils

Previous land uses can have significant impacts on your food safety planning. An assessment of your site should consider:

- ❖ Is there evidence of dumping or industrial waste?
- ❖ Have contaminants been deposited by past flood events, runoff or drift?
- ❖ Is this a previous building site?
- ❖ Is there concentrated animal production nearby? If so, how would wind or water carry the waste?

Conducting a previous land use risk assessment on your soil provides a more detailed look at the likelihood that any portion of the soil may be contaminated. Unless there are signs of contamination or recent uses that cause concern, soil testing will not be required as part of the GAP audit. Signs that an auditor will look for to indicate soil contamination include recent flooding, evidence of past dumping, indications of misuse of animal waste, or historical use of the land in concentrated feeding operations of livestock and any abandoned buildings. If there are signs of contamination, soil testing for harmful pathogens will be required and those results must be available to the auditor. If soil contamination has occurred, the food safety plan must specify how contact with that soil will be minimized or prevented.

If your fields have been flooded they may have been contaminated by pathogens off-site, so the soil should be tested prior to use for growing crops. If the soil samples show no potential contaminants, there is no timeframe or waiting period before planting on the land. In the case of flood contamination, annual crops harvested the same season are at greater risk than perennial crops that will be planted but not harvested in the same season. Root crops are at a greater risk than crops that will grow above the ground. However, the basic rule is that soil should be sampled on previously flooded crop lands.

QUESTION 1-26

Traceability

Your farm records should always include an up-to-date map that shows the crops grown in each field or production area. This will allow you to better identify the source of any potentially contaminated product in the case of a food safety concern reported by a customer or identified in your packing process after harvest.

One step forward and one step back is the general rule for traceability, so you must have recorded enough information to know from which field a

product was harvested, and to which buyer it was sold. You can use your existing farm map to create a lot numbering system which will uniquely identify the product for you in case you need to address a customer concern or initiate a recall. Your unique lot number will be recorded on the packing box delivered and/or the invoice sent to the customer.

Traceability and recall is covered in more detail in the General Questions section of this Guide under Questions G-1 and G-2.



A farm map, such as the one shown with color-coded fields, could be paired with a season-specific crop list of what is planted within each color-named field. This farm also uses a system of numbering irrigation risers to more closely identify the area of a field. For example, O3 would be Orange farm, Riser 3. (Orange farm is named for the orange gate.)



Part 2

This section includes field sanitation and hygiene as well as field harvest and transportation.

Field Harvest and Field Packing Activities



Whether it's done exclusively by hand, with mechanical harvest equipment, or a combination of both, all growers interested in meeting Good Agriculture Practices need to understand and implement best practices for field harvest and packing to minimize the risk of contamination.



YOUR FOOD SAFETY PLAN AND SOPS SHOULD ADDRESS:

- ✦ A pre-harvest assessment to identify contamination risks that are unique to your farm.
- ✦ Appropriate placement of field sanitation units (port-a-potties) and handwashing stations.
- ✦ Access to potable water for employees.
- ✦ Cleaning and sanitizing of harvest tools and harvest totes.
- ✦ Maintaining and inspecting mechanical harvest equipment to prevent broken headlights, windshields or fluids from contaminating product.
- ✦ Applying only microbially safe water to the product at or after harvest.
- ✦ Protecting product by covering it during transportation.
- ✦ Proper storage and use of packing containers.
- ✦ Traceability.

Pre-Harvest Assessment

GAP/GHP AUDIT CHECKLIST

QUESTION 2-1

An environmental assessment of the production fields and surrounding area should be done

before harvest to evaluate for potential sources of contamination and readiness for safe planting and eventual harvest. The assessment can be as simple as a checklist or written description to guide a walk-through of the farm's growing areas and review of harvest equipment. It may include a review of:

- ✦ Proper location and number of toilets and wash facilities.
- ✦ Availability of potable water for workers.
- ✦ Harvest containers – availability, location, cleanliness.
- ✦ Condition of harvest equipment.
- ✦ Evidence of crop damage from domestic or wild animals.
- ✦ Signs of physical contamination in the crop production area.
- ✦ How fuel and other chemicals are stored to prevent contact with crop areas.



QUESTIONS 2-2
THROUGH 2-5

Related worker sanitation and hygiene topics addressed in General Questions G-3 through G-15

- ❖ Systems to isolate contaminated fields with “no-harvest” indicators.
- ❖ Evidence of physical contaminants such as manure, debris, trash piles, or standing water.
- ❖ Whether crop transportation equipment is clean and in good repair.

Your farm’s SOPs for pre-harvest assessment should be written to reflect the unique practices and potential risks on your farm, with the goal being prevention of contamination. The farm’s SOPs should include a policy clearly stating the remediation steps to take if initial or ongoing assessment strategies identify contamination. Should contamination occur, your SOPs will guide you and your staff in the appropriate steps to correct the problem and prevent your buyers from consuming or selling adulterated product. Both the assessment itself and the steps taken in the event of contamination, require you to keep records documenting that they occurred.

A pre-harvest assessment should be done at least once each harvest season, before harvest begins. You may choose to do it more frequently, or periodically during the growing and harvest season.

Whatever method and frequency you choose, it must be written in your SOPs and then implemented and documented according to the policy. Best practice is to keep a log so that growers and workers can document any signs of concern throughout the season, along with the remediation action taken. Also, document walk-throughs that show no signs of concern. This will show the auditor that someone is doing an assessment as often as the policy states. During an audit, the auditor will verify the fact that assessments and corrective actions are being done in accordance with the policy. The auditor will not interpret the pre-harvest assessment itself, nor what you or your workers find and document during an assessment.

Field Sanitation and Hygiene

Properly placed and maintained toilet and handwashing facilities that are easily accessible to workers are essential to prevent contamination of the product from human waste.

Guidelines for field sanitation units (port-a-potties) are detailed in the Occupational Safety and Health Act (OSHA) 29CFR, Part 1928.110. Farms must provide one field sanitation unit, and one handwashing station per 20 employees, or as per applicable regulations. Also they must be no more than $\frac{1}{4}$ mile walk from where a hand-laborer is working in a field. Smaller farms (with fewer than 12 employees working in the field on any given day) or farms where employees work three hours or less during the day (including travel time) are not required to provide field sanitation units, per federal OSHA regulations. In that case, a toilet facility and handwashing station are still required to be readily available to workers. If that facility is in a home, the auditor will need to see it during the audit.

If using field sanitation units, deciding where to locate each unit should include consideration of prevailing wind that could tip the unit over in a storm, any slope of the ground on which it is sited which could allow the unit to be accidentally or deliberately overturned, and whether any crop or produce storage areas are downhill of the unit in case of a spill. Each unit should be easily accessible for maintenance, so nearness to a road should also be considered in selecting the location. Your farm map will be useful for this step. Sewage and grey water must be properly disposed of and the facilities serviced regularly, and with records for audit review reflecting dates of service in accordance with your SOP.



Some farms use field sanitation units on wheels so they can be hitched to a tractor or other vehicle and pulled to the various harvest locations. If using wheeled sanitation units, it is important to carefully plan where they will be located and have a written plan for what will be done in case of tipping or leakage.

Your SOPs must include a written policy and clean-up plan for what to do in case of a sanitation unit spill. This will include what will be done to clean up the spill and what will be done with any contaminated product.

All handwashing facilities must use potable water, and documentation of that potability is

required. If water is supplied with the unit as part of the sanitation facilities service, the farm still must provide documentation to verify that the vendor has had the water source tested to confirm that it meets the safe drinking water standards. If you're using municipal water, provide a water quality report from the municipality. This documentation must be available for review at the time of the audit.



A field handwashing station can be very simple, and made from easily obtained components. See GAP/GHP AUDIT Questions G7-G9 covered on page 6 of this guide. This unit is designed to be easily moved to the various sites where field crews are working. This is convenient for harvest crews who may have lunch or smoke breaks off to the side of a field, rather than going in to a lunch or break room.

SAMPLE PORT-A-JOHN SPILL RESPONSE PLAN

- ✦ Any affected produce is immediately disposed in a covered waste bin.
- ✦ The contaminated area will be marked off with caution tape or string.
- ✦ Signs in appropriate languages will be posted at the perimeter prohibiting entry to the contaminated area.
- ✦ People and animals will be kept out until the port-a-john is sufficiently decontaminated.
- ✦ Any solid waste still resting on the surface will be shoveled up and removed to the waste bin.
- ✦ Any affected permanent structures will be hosed off and disinfected with a dilute bleach solution.
- ✦ The sanitation unit will be cleaned up and replaced by the company providing the units and maintenance services.

Good Agricultural Practices for Small Diversified Farms: Tips and Strategies to Reduce Risk and Pass an Audit, Ben Chapman, Ph.D., Audrey Kreske, Ph.D., and Roland McReynolds, Esq. Published by Carolina Farm Stewardship Association in partnership with North Carolina State University, www.carolinafarmstewards.org. Reprinted with permission.

Field Harvesting and Transportation

Regardless of whether the farm's field workers are packing into totes going to a packing shed, or directly into the final shipping box, the food safety plan should contain guidelines for staff to follow in order to minimize the risk of physical, microbial and chemical contamination of the product in the field, and to respond in case of accidental contamination.

This section covers best practices for field harvest, both hand-harvested and mechanical, whether the product is field packed or delivered to a packing house for washing and packing.

HARVEST CONTAINERS

Harvest produce into clean, lined, or single-use packing totes or bins. Bulk harvesting containers and re-useable totes or bins should be cleaned and/or sanitized before first use and then kept as clean as practical thereafter. This needs to be monitored after each load is delivered and before reuse. They should be stored to minimize risk of contamination from birds or rodents, and should be cleaned and sanitized before harvest. Your SOP will need to include a policy and schedule for use and cleaning of harvest and packing containers, and implementation documentation is required. This can be a log of scheduled cleaning and sanitizing.

Containers used for harvesting, transporting and shipping fresh produce should be specifically designated for that purpose, and should not be used for other purposes. Workers should be instructed not to use harvesting totes to carry their food, tools or clothing, or any other non-produce items. Of course, no container that has

GAP/GHP AUDIT CHECKLIST

QUESTIONS 2-6
THROUGH 2-14, AND
2-16 THROUGH 2-18

GAP/GHP AUDIT CHECKLIST

QUESTIONS 2-6, 2-8,
2-14 AND 2-16

AUDITOR TIP



Different scales of hydro-coolers, which can be used to remove field heat from produce, can also be used to clean and sanitize harvest totes.



Simple logs tailored to record your specific practices, are necessary to document that SOPs related to container washing and sanitizing are followed on a regular basis.



There are many ways to clean and sanitize harvest totes. It is also helpful to scrub bins before the sanitizing step, to remove heavier dirt or caked mud. Whether using a larger produce wash system or a small homemade bin washer attached to pressure hoses, or the pressure hose system directly, you can make a system into which you can inject a chlorine solution can be injected to sanitize bins.

held hazardous chemicals or other contaminants should ever be used for food. If you have containers similar to harvest or food storage containers that you want to use for chemical storage or other non-food uses, they should be CLEARLY marked so they do not get re-used for food harvest or storage, and workers should be instructed accordingly.

Containers should be checked for damage, and any containers with damage should be repaired or discarded.



Harvest containers and packing boxes should be stored off the floor or ground, on pallets, carts or shelves, to avoid contamination from standing water or dirt.

HARVEST PRACTICES THAT MINIMIZE CROSS-CONTAMINATION

During harvest, workers should keep both the crop and containers as clean as possible, and remove excessive dirt and mud from produce.

HARVEST USING CLEANED AND SANITIZED TOOLS

Your SOP should contain a clear policy and procedure for making sure that harvesting tools are cleaned and sanitized on a regular basis, along with documentation that the plan is being followed. Best practice is to keep harvest tools on the farm, rather than letting workers take them home or keep them in their vehicles, so that they cannot be used for other purposes or accidentally contaminated off-site. This also allows them to be collected for cleaning and sanitizing as part of the daily work plan, and checked off on a log to document the process.



Root crops, like carrots, come out of the ground covered in soil. Best practice is to remove as much loose dirt from the products as possible before packing into bins. Loose dirt can transmit pathogens to other products in the bin or between bins if they are stacked.

ON-FARM EXAMPLES



GROWERS USE A VARIETY OF STRATEGIES to prevent contamination of the product after it leaves the field.



One option for clean harvest is to harvest into boxes or totes on the ground, but transport them in a single layer to the washing or packing shed, rather than stacking.



If stacking is necessary to your farm, then there are options for keeping harvest totes off the ground. On some farms, a tractor pulls a cart with bins directly into the field to serve as a mobile packing station.



Another solution is to build or purchase a wheeled cart that straddles the rows, though it does require an investment of time and/or money up front.



For some products, it may work to harvest them into clean buckets and then transfer the produce into clean boxes or totes that can be stacked.



Harvest crews could also use extra totes or other barrier under the harvest tote. If an extra tote method is used, a different color tote designated not for harvest use would be recommended. Even a clean piece of tarp could be used to keep produce and harvest totes off the ground. Tarp or other plastic barrier would be lightweight to carry to field, easy to clean between uses, and sturdy enough for repeated uses. Each farm can tailor a solution that meets the needs of the specific situation.

ON-FARM EXAMPLES



A FARM IN WESTERN WASHINGTON

has a clear and detailed policy and procedure for harvest knives. They gather the tools at the end of the work day and clean and sanitize them. In the morning, clean knives are given to workers. Over the lunch break, harvest workers put their knives into a bucket with a bleach water solution for sanitizing. For workers who wish to use specific tools, it is easy to mark them in some way that allows them to identify their tools when it's time to go back to work. Harvest tools with plastic handles are easier to clean and sanitize than wooden handled tools.





GLOVE USE

Follow glove usage policy if you have one. If gloves are required or are being used on the farm, then you should have a glove use policy in place and have supplied proper training to ensure that the gloves are not a possible risk for contamination. One concern is that gloves taken off the premises could be used for another purpose, or could easily become contaminated by multiple uses without a schedule for cleaning and sanitizing. The following are recommended components for an SOP for glove usage:

- ✦ Gloves are not a substitute for handwashing; hand-sanitizers are not a substitute for handwashing.
- ✦ Policy should cover use, maintenance, and disposal.
- ✦ Gloves shall not be removed from the work area during breaks.
- ✦ Reusable gloves shall not be taken home for cleaning and sanitizing OR, if employees may take their gloves home to clean them, the SOP must indicate that this is allowed and that they will be checked prior to the start of each work day to verify that they are clean.

The auditor will review the glove usage SOP, if you have one, and examine records of performance, and verify that use is consistent with the SOP.



CLEAN AND WELL-MAINTAINED HARVEST EQUIPMENT AND MACHINERY

Harvest containers, including truck beds or bulk containers, and other harvest equipment and machinery used in the fields should be kept in good repair so that they do not become a source of contamination.

GAP/GHP AUDIT CHECKLIST

QUESTIONS 2-8
THROUGH 2-13



Regular inspection and repair of trucks, tractors and harvest equipment will help minimize risk of contamination from broken parts or leaking fluids

When machines are used in the harvesting process, your pre-harvest assessment should include checking for potential leaks of hydraulic fluids, oils and grease from the machinery to the field. Cleaning and sanitizing the machinery must be done prior to the start of the season or as scheduled. If a tractor is used in a field that has been dressed with raw manure, or that has been affected by other livestock manure, it must be cleaned and sanitized prior to being used in a food production field that is within 120 days of harvest. All light lenses must be covered or maintained to prevent glass or plastic from contaminating the product.

You must have SOPs with detailed instructions for response in case of possible contamination during harvest. You will need to have a policy for breakage of glass or plastic and one for spills or other contamination from chemicals, petroleum, pesticides or other materials.

You must also prevent and inspect for any rocks, glass, metal or other foreign objects being introduced to the product from your harvest machinery.

TRANSPORTATION FROM FIELD TO STORAGE AND PROCESSING AREAS

GAP/GHP AUDIT CHECKLIST

QUESTIONS 2-17 AND 2-18

Clean hauling vehicles regularly. If you're putting produce directly into a vehicle for bulk hauling, that vehicle should be cleaned and/or sanitized in the same way harvest bins would be. For vehicles or flatbed trailers used to move product from field to storage areas or processing areas, the surface needs to be cleaned

regularly and kept free of debris, to reduce risk of cross-contamination from boxes put in the truck. Remember, if harvest bins have been on the ground, they should not be stacked on top of each other for transport.

Cover produce during transport. GAP standards require that you have a policy in place that harvested produce being moved from field to washing, packing or storage areas is covered. This is to reduce risk of contamination by other vehicles, from birds or overpasses, or from airborne oils and dust. Produce in closed boxes or cartons is not considered covered. Tarps or enclosed trailers are examples of recommended practice. The auditor will determine whether the policy is being met by observation and by talking with employees on-site.

When transporting produce in from the field, stacked bins (that have not been in contact with the ground) should be covered to reduce contact with airborne dust and other contaminants during the trip.



Post-Harvest Water Usage

Water applied to harvested product must be microbially safe. This means that it

is agricultural water which meets the microbial requirements of the Environmental Protection Agency drinking water standards or a similar standard, or is chemically treated to become microbially safe. There is no one standard that is universally recognized as ensuring safety for post-harvest use on food crops. The GAP/GHP audit requires that the farm must have a risk assessment addressing water use, and make decisions based on it. This could include a policy that you will follow a specific published guidance document, such as the recreational water standards or you could set your own specific tolerance or levels from another published source. Those standards must then be met and documented. It is important that you educate yourself on water quality standards specific to the crop you are cooling or washing, so you set your tolerance at a reasonable level. Your water risk assessment must detail how you will determine your water quality and have measures in place on a planned response if your water does not meet your criteria.

If all the farm's water is drawn exclusively from a municipal source, then the water is considered to meet the microbially safe standard required for post-harvest usage. A farm's well water may meet that standard, but would need to be tested to determine that. Refer to Water Usage GAP/GHP Checklist Questions 1-1 through 1-5 for information on the kind and frequency of testing needed to determine whether a farm's well water meets the standard without secondary filtration or chemical treatment. Knowing the source of the water, and reviewing a certified laboratory's test results of that water will help the operator determine whether the water source used for irrigation is appropriate for post-harvest application. Surface water, taken from rivers, irrigation canals

GAP/GHP AUDIT CHECKLIST

QUESTION 2-15

and holding ponds, are likely to require filtration and/or chemical treatment to bring them to the standard of microbially safe.

Water at first use must be microbially safe, as discussed above. The challenge with post-harvest produce water is avoiding contamination and reuse of water that may contaminate the produce. One option is to use spray tables or other single use water systems, which will then require adequate drainage of large quantities of water. This way any microbial contamination is washed off the produce and discarded, rather than reused for washing subsequent produce batches.



Spray tables are a safe way to wash produce without reusing the water and introducing pathogens from one batch to the next.

Many farms wash produce in dunk tanks, often made from repurposed bathtubs or water troughs. This presents challenges under the GAP standard because the buildup of particulates and microbes can easily cause cross-contamination of products washed in the same water.



What are the requirements for draining or containing water that has been used for produce washing, bin cleaning, etc. in a field packing shed?

Water that has been used for field packing and produce washing must be drained out of the packing area and other high-traffic areas. The drainage must not create areas where water pools for long periods of time or where foot traffic could possibly contaminate the fields and/or other work areas. You must also make sure that the water being drained does not come into contact with un-harvested crops and does not affect your irrigation water source.



Produce wash water must either come from a potable source, or be determined to be microbially safe. If re-used, water quality must be maintained to minimize the risk of cross-contamination and to ensure that the water is microbially safe.

If produce wash water is re-used, whether in dunk tanks or spray wash lines, antimicrobial agents can be added to keep the water at microbially safe levels. When using antimicrobial agents, you must develop a standard and a schedule for testing the water to keep that antimicrobial agent's levels in the water at an effective level.

HOW TO ADD SANITIZING AGENTS TO POST-HARVEST PRODUCE WATER



Typical water sanitizers include chlorine and peroxyacetic acid (PAA), a chemical sanitizing solution which is sold under several trade names and is preferred by many certified organic producers.

When using chlorine, the chlorine must be labeled for use on fresh fruit and vegetables. A typical concentration of chlorine is 50-200 ppm of active chlorine at a pH of 6.5-7.5 with a minimum contact time of 1-2 minutes. An important point to keep in mind when using chlorine is that if the pH does not remain in this range, the chlorine will be mostly in an inactive form, so your SOP and operations should include a plan for regularly-scheduled testing of water to maintain appropriate pH levels. This information needs to be documented.

Read product labels carefully in order to apply sanitizers in the right combination of frequency and concentration for use in wash water and on food contact surfaces, and note that you must follow FDA, OSHA and EPA rules for their usage and disposal.

Post-harvest water SOPs should reflect the farm's unique production practices. The water must be sanitized and changed as often as is necessary, given the practices on the farm, to maintain microbially safe status. If the farm either re-uses potable water in its post-harvest processes, or relies on a filtration or sanitizing step to bring water to a microbially-safe standard, then it must develop a water quality testing, treating and changing SOP that prevents contamination and cross-contamination from post-harvest water.

Product Packing

The GAP standard requires new and/or cleaned and sanitized containers for packing and delivering produce.

Reuse of boxes is allowed only if they can be cleaned and sanitized between uses. It is not a good practice to reuse cardboard boxes that have been out of your control (i.e. with CSA customers or others), because you cannot be certain how the box has been used or what it's come in contact with during the time it was out of your control. Waxed cardboard boxes cannot be cleaned and sanitized without causing breakdown of the cardboard, though they could be reused with new, unperforated plastic liners. Many farms invest in reusable plastic containers for transporting product to farmers markets or to buyers, or for their CSA customer deliveries. These are meant to be reused, and then clean and sanitized before each use. Whatever packing system is used, the practice must be written into your SOPs and cleaning and sanitizing records or logs are necessary.

GAP/GHP AUDIT CHECKLIST

QUESTIONS 2-19 AND
2-20



Packing fruits and vegetables into new boxes reduces risk of contamination. A piece of paper adds an extra protection from dust or dripping water coming into the top of the box during storage or shipping.

All packing materials and containers should be stored so that they cannot be damaged or contaminated by pests, water, dirt or chemical spills. If they are stored outside, they should be covered. The auditor will observe whether this standard is being met.

For some products, it may be desirable to field harvest and pack without a wash step. This may

ON-FARM EXAMPLE



SIMPLE SYSTEMS CAN BE DESIGNED to meet your farm's needs. This farm has built an overhead box staging system that keeps boxes off the floor and is convenient for packing product directly from wash tanks.



QUESTION 2-21

Traceability

Traceability and recall is covered in more detail in the General Questions section of this Guide under Questions G-1 and G-2.

All harvested product should be marked in accordance with your traceability plan as described in the General

Questions section of this guide. For field packing directly into delivery boxes, best practice is to label the box at the time of harvest so accurate information will be conveyed to customers for use in the event of a recall. For produce harvested for transport into a packing shed or other facility, picking records should identify harvested date and location so that information can be carried through into traceability practices at the next stage, according to the plan in your SOPs. The GAP audit requires that you keep documentation of harvest identification for traceback purposes, according to the system defined in your written traceback and recall plan.

Workers may harvest into clean, sanitized buckets designated for harvest, and then dump directly into new boxes. That way, the boxes can be packed in the field and then stacked and stored for later delivery without washing or repacking.



What are the requirements for cleaning and sanitizing harvest or delivery containers?

Containers should be cleaned by removing dirt and debris first. Scrubbing with water will remove particles and dried-on mud. For sanitizing, you will need to use a chemical compound designed to kill microorganisms. Two of the most common compounds are chlorine bleach and quaternary ammonium compounds (quats). Mixing the appropriate amount as per the label with potable water creates a sanitizing solution.

be true of delicate berries or leafy greens, which do not hold up well when wet, or for produce that grows on taller plants off the ground and does not get significantly dirty. There is no GAP standard that says your produce must be washed; only that, if you do wash, it is done in ways that minimize the risk of microbial contamination.

Containers should be cleaned by removing dirt and debris first. Scrubbing with water will remove particles and dried-on mud. For sanitizing, you will need to use a chemical compound designed to kill microorganisms. Two of the most common compounds are chlorine bleach and quaternary ammonium compounds (quats). Mixing the appropriate amount as per the label with potable water creates a sanitizing solution.



House Packing Facility



A house packing facility audit will evaluate whether the packing facility and practices meet the standards for food safety outlined in the GAP/GHP audit checklist. Like a farm's field harvest and packing practices, every packing house operation will reflect the unique characteristics in place at the farm: scale, product grown, harvest season, markets served, transportation and more. Producers must get at least 80% of the points possible in order to pass that section of the audit, but there are various ways to go about meeting the standard.

The scope of the audit is selected by the farm, usually in response to a buyer-request. Many small, diversified farms will not consider this section, as they may be field packing product and selling to a variety of buyers without further handling. However, if a grower operates even a small, simple house packing facility, they should carefully consider contamination risks and prevention strategies to minimize those risks, even if an audit of the packing house is not required by any of the farm's buyers.

This section addresses packing house receiving, washing/packing line, worker health and hygiene, general housekeeping, pest control and traceability



Receiving

QUESTIONS 3-1
AND 3-2

Product coming from the field to the packing station must be staged for packing in such a way that it is protected from contamination. Good practices include protecting the product from contact with agricultural or other chemicals, assuring that there is not standing water coming into contact with containers, protecting the staged product from impact from birds or other animals, and making sure that containers are not stored on the ground. When the product is stored for longer periods of time before packing, similar protections should be in place, with additional attention to controlling the temperature at which the product is stored.



Produce should come into the packing house from the field in good, clean condition, based on field packing guidelines from Part 2 of this guide. Produce bins should be transported without stacking if the bins were on the ground during harvest, but can be stacked if they were packed into clean bins on a flatbed or another barrier was used between the bins and the ground.



How do I know if my packing operation will be considered “field packing” or a “house packing”? Since the farm selects the sections of the checklist to be audited, this question can be answered in part based on how the farmer/packer views his or her operation.

Generally the difference between a field pack operation and a house pack operation is at what point the product is packed into a final shipping container. A field pack operation will pack directly into the final shipping box or pack at a staging area in or near the field. Alternatively a house packing operation will remove the product from the field, stage it for packing, and then pack into a final shipping box. A house packing operation may include washing, rinsing or cooling the product, possibly a sorting or grading line, sizing the product and storing the product.

Washing/ Packing Line

QUESTIONS 3-3
THROUGH 3-7

Managing water in the washing and packing operation will vary from one facility to another, but all require good water management practices to minimize the risk of contamination from water. Essential considerations include:

- ❖ Source water must be potable or microbially safe at first use. That means that after chemical treatment, the water must be microbially safe, which means it must meet the microbial requirements of the EPA drinking water standards.
- ❖ If water is re-circulated and re-used, its quality must be monitored regularly and you must treat with an antimicrobial agent prior to re-using it in your process.



Taking the field heat out of the product can be done a number of ways, including using hydro-coolers, dunk tanks, and by icing the produce.

- ✦ Processing water (dump tanks, flumes, etc.) temperature must be maintained at a temperature appropriate for the produce type. Water temperatures should be maintained within 10 degrees F of incoming product pulp temperature to minimize water infiltration. Usually if water temperature is warmer than the product, this will be a good rule to follow.

Waste water generated in cooling, washing and packing processes, whether chemically treated or otherwise, must be managed to prevent excessive pooling, spilling, or other drainage problems that could lead to contamination risks.

As noted in previous sections, if using municipal water, your municipality is responsible to test and assure that it is potable. Well water must be tested at least once per year. Water tests or municipal reports are required documentation.

Chlorine is commonly added to water for post-harvest treatment of fresh produce at 50-200 parts per million total chlorine, at a pH of 6.0-7.5 with a contact time of 1 or 2 minutes. Chemicals used in this application must be labeled for fruit and vegetables.

GAP/GHP AUDIT CHECKLIST

QUESTION 3-8

Food contact surfaces, including table tops, benches, sinks, conveyors and cleaning

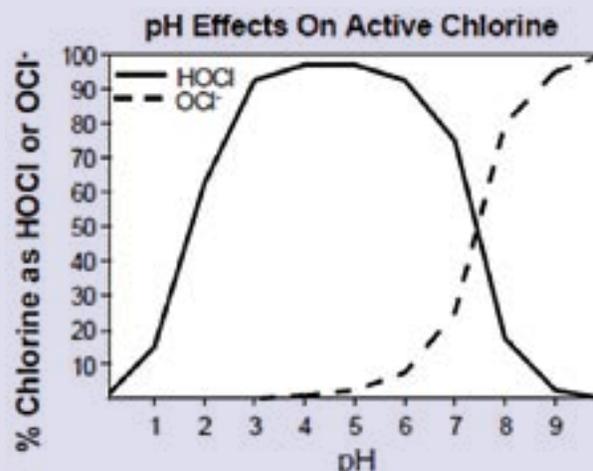
equipment like brushes can be sources of contamination by workers, produce or other processes in the packing area. These must be cleaned and maintained adequately to minimize this risk. An



What are water quality standards requirements for post-harvest produce washing facilities and packing areas?

Any produce that is washed at or after harvest must be done in water that is microbially safe. Microbially safe means that it is agricultural water which meets the microbial requirements of the EPA drinking water standards. Water at first use must be microbially safe and if re-used, its quality and/or content of antimicrobial agents should be monitored. The monitoring must be documented, noting the date, time and results. Note that potable water (a higher standard) must be used for handwashing and drinking purposes.

Chlorination of wash water is very important. Chlorine can reduce the spread of contamination from one item to another during the washing stage. The pH of the wash water should be maintained at 6.5 the 7.5 for best results. When wash water pH is between 6.5 and 7.5 you will have conditions that will provide both the safest pH for people and for fresh produce. If the pH falls below 6 chlorine will escape as a gas which can build up in the air of the packing house, which is dangerous for workers. Typically 1 to 2 mls of chlorine bleach per liter of clean water will provide 100 to 150 ppm total Cl. More chlorine will be required if temperatures are high or if there is a lot of organic matter in the wash water.



This chart was published in 2002 as part of *Small Scale Postharvest Handling Practices: A Manual for Horticultural Crops* (4th Edition), and was reprinted with permission from the University of California, Davis, Postharvest Technology Research and Information Center

auditor will visually inspect the facility's processes and food contact surfaces to determine whether the surfaces are in good condition and are being kept adequately clean. Cleaning schedules must be established and followed throughout the season, with records to document.



A careful review of your packing house in action will allow you to assess what surfaces may come into contact with produce, and identify measures to keep them clean, and develop a schedule for cleaning and sanitizing.

GAP/GHP AUDIT CHECKLIST

QUESTION 3-9

When product is moved from one station to another, (for instance, from unloading to storage or storage to loading), the potential for contamination from surrounding structures and machinery must be considered. The auditor will observe the possible sources of contamination, such as open-mesh/steel-mesh catwalks that might allow soil or rocks from workers' shoes to drop down onto the product. Your plan should address these and other possible sources, such as leaking pipes, condensation on ceilings, or motors without shields.

If you're cooling the product using cold water or ice made on-site, the source water must be potable. If ice is purchased from a supplier, the supplier must make, transport and store the ice in sanitary conditions. The auditor will review records and investigate the source of the water as part of an audit. Whether the ice is manufactured on-site or purchased from

GAP/GHP AUDIT CHECKLIST

QUESTIONS 3-10 AND 3-11

a vendor, the records showing water potability and a regular schedule for sanitizing the ice production, storage and transportation facilities must be provided to the auditor.

Worker Health and Hygiene **GAP/GHP AUDIT CHECKLIST**

QUESTIONS 3-12 THROUGH 3-14

Workers in a packing house should be trained on best practices for handwashing, bathroom, and break room practices, and should demonstrate those practices in the daily packing activities. The packing house must have clean, well-maintained, easy-to-access restrooms, and clear signage about handwashing following bathroom usage, breaks for meals, smoking, and other work stoppages.

Break and eating areas should be separate from the packing area, whether that is in a separate building, or simply a cordoned off section of the same building supplied with tables and chairs. Depending on the layout of the packing area, there are several different ways of meeting the GAP standard, which is intended to ensure that workers are not eating or taking breaks directly in the produce areas.

If your SOPs specify use of hair or beard nets, or define when jewelry is/is not allowed to be worn, the auditor will check on-site practices against that written standard. If you require glove use, or if your employees are allowed to wear gloves as a personal preference, (e.g. for warmth in a packing house), your SOPs must include procedures for use, replacement, cleaning and sanitizing of gloves. In all cases employees should demonstrate knowledge of, and compliance with, the SOPs.



If your farm has a policy that requires hairnets or gloves, or prohibits jewelry, workers should be trained and consistently follow the rules. An auditor will look to see whether they are dressed in ways that meet your SOPs.

Packing House Policies



ON-FARM EXAMPLE

GOOD MANUFACTURING AND HYGIENE PRACTICES

The following good manufacturing and personnel hygiene practices have been established and communicated to all employees as a mandatory rule:

- ✦ Wash hands thoroughly with soap and warm water, and sanitize, before starting work, after each absence from the work station, after using the restroom, after breaks and at any other time when the hands may have become exposed to soil or contaminated.
- ✦ Maintain adequate personal cleanliness. Keep hair tied or short, trimmed and clean fingernails, and, if gloves are not used, free of nail polish.
- ✦ Smoking, eating or drinking is not allowed in work areas.
- ✦ Personal items are not allowed in work areas (bags, purses, jewelry, watches, musical dev., etc).
- ✦ The use of cell phones is not allowed or any electronic devices while working.
- ✦ Wear outer garments and remove all items from top outside pockets.
- ✦ Remove all protective and outer garments and store them in a designated area when on break and before using the restrooms.
- ✦ All minor cuts and wounds must be covered with waterproof detectable blue bandages with metal strip.
- ✦ Report any cuts and/or any illnesses that might be a contamination risk to the fresh product.
- ✦ Any person showing boils, sores, open wounds or exhibiting signs of food-borne illness must be excluded from operations involving direct and indirect food contact.
- ✦ No animals allowed.
- ✦ No children or infants allowed.
- ✦ Employees will stay at their designated area of operations.
- ✦ Produce boxes, lugs and bins are only used for produce
 - No cross contamination
 - Mark "X" on unused cases
 - Non-solid plastic bins are used only for produce
 - Boxes and lugs must be on a pallet at all times

This packing house policy from a Washington grower provides a starting place as you plan your policies based on your own practices and risks.

WHEN IN DIRECT CONTACT TO FOOD

Wear gloves. (If gloves are taken home, employees need to discard it. Only use latex free gloves).

- ✦ Wear hats or hairnets.
- ✦ No jewelry is allowed, except a plain wedding band.

CORRECTIVE ACTIONS

All employees must follow the GM&HP as mandatory rules. If any employee is not in compliance and breaking the food safety rules the following corrective actions must be taken by the immediate supervisor:

- ✦ Remind the employee of the rule being broken.
- ✦ Employee must correct behavior and leave the facility if not able to fulfill the food safety rules (i.e. if he has not reported he is sick).
- ✦ Verbal warning for non-complying to the food safety rules.
- ✦ If reoccurrence, a first written warning will be issued.
- ✦ If second reoccurrence, a second written warning will be issued and employee will be suspended.
- ✦ If third reoccurrence, employee will be terminated.
- ✦ In case of a non-compliance visitor or contractor, the person will receive a verbal warning and will be requested to take a corrective action according to the situation; if the person does not follow the instructions given by the Supervisor or area Manager, the person will be requested to leave the facility.
- ✦ If animal/s is found around the Packing House corrective action will be in accordance with 3.12.2 Field Policies.

SICKNESS REPORTS / RETURN TO WORK POLICY

When an employee has reported sick/illness, the Supervisor or area Manager must fill a sick/illness report, and the employee will be authorized to return to work if:

- ✦ Employee meets the GM&HP stated above and no signs of illness are detected, and/or
- ✦ Employee presents a doctor's note stating that he/she can safely return to work.
- ✦ The return to work policy has been communicated to all employees as part of the GMP training program.

GENERAL RULES FOR GLASS

- ✦ All lights with the production, storage and maintenance areas are protected in some manner. Where Teflon coated bulbs have been used, copies of invoices have been retained.
- ✦ No glass items are stored in the storage, production or maintenance areas.
- ✦ Glass items are allowed in the break room only – these do enter the production, storage or maintenance areas.
- ✦ Staff is not permitted to bring glass into the storage, production or maintenance areas.
- ✦ Glass thermometers are not allowed inside the storage and production areas.
- ✦ Windows inside the production, storage and maintenance areas are either made of plastic or have been laminated.
- ✦ There are no glass skylights in the facility.

Reprinted with permission from Imperial's Garden, Wapato, WA

General Housekeeping

The packing house environment must be maintained in a sanitary way so that equipment, work surfaces, floor drains and water (including waste water) do not become risks for microbial contamination of your product. Your food safety plan should be based on a review of the packing house, the grounds around it, and its regular uses and activities to make sure there is not a significant source of litter or debris, that water used in the facility is captured and/or drained away from the facility, and that you have identified any potential sources of contamination. Your food safety plan should specify the preventive steps that will be taken to make sure problems don't arise, as well as corrective actions to address them as needed. You will also need to keep documents that the food safety plan required actions are taken.

GAP/GHP AUDIT CHECKLIST

QUESTIONS 3-15 THROUGH 3-29

If the packing house uses mechanized equipment - such as automated unloading ramps into flumes, automatic sorting or grading equipment, or automated packing lines - then the lubricants and chemicals being used on that equipment must be clearly labeled as food grade product. The auditor will ask to see either the containers of the chemicals and lubricants used, or recent receipts for their purchase.

QUESTION 3-15

GAP/GHP AUDIT CHECKLIST

QUESTION 3-16

If the facility uses non-food grade chemicals or lubricants for purposes like maintaining or cleaning equipment or machinery, those must be located outside the packing area or carefully segregated from contact with the packing line or any contact surfaces that may touch the produce. Food grade and non-food grade chemicals and lubricant must also be stored separately from each other.

ON-FARM EXAMPLE



THIS FARM HAS A SPECIFIC STATION for boot washing and hand washing, in a separate area of the packing house from where produce is stored and washed. The boot station allows workers to avoid tracking field dirt or other contaminants into the packing areas. The handwashing station provides ample space for multiple workers to wash up at the beginning of a shift and after breaks. Note that the hand wash station has all the necessary elements: potable water, disposable paper towels, liquid pump soap, a trash can, and drainage away from the foot traffic area.



GAP/GHP AUDIT CHECKLIST

**QUESTIONS 3-17
THROUGH 3-19**

The spaces surrounding the packing area should be maintained so there are not significant accumulations of standing water, trash, food waste, or other debris that might attract pests or be likely to get tracked back into the facility by workers. The packing house should be located at a good distance from the facility's trash/debris collection areas for the same reason.



An open-air packing shed must be kept clean and regularly monitored for wildlife, pooling water or other contamination risks.

GAP/GHP AUDIT CHECKLIST

**QUESTIONS 3-20
AND 3-21**

If possible, the packing area should be an enclosed building which will minimize the risk of airborne contaminants, and those that would be carried by things such as rain, pests, and wildlife. However, simple open-air pole buildings used as packing sheds can meet the GAP standard if they are sufficiently protected from potential contaminants. In an open-air shed there must be prevention strategies in place to ensure that birds and other pests are not attracted to the area by standing water, waste product, or easy access to nesting materials such as cardboard and paper. The interior work space must be maintained in an orderly and reasonably clean way, with no obstructions of floor drains and no significant standing water.

GAP/GHP AUDIT CHECKLIST

QUESTION 3-22

Floor drains should be free of any blockages so that water does not pool and create a source of potential contamination. The auditor will likely inspect the floor drains to determine their functionality.

GAP/GHP AUDIT CHECKLIST

**QUESTIONS 3-23
AND 3-24**

Spaces through which product moves (e.g. from staging to packing) should be protected from possible contamination from overhead pipes, ducts, fans and ceilings. Any glass such as light bulbs or lighting equipment that is above the product flow zone represents potential for broken glass to end up in the packed product. The facility's prevention plan might include installing shields over the glass fixture, using shatter-proof light fixtures that cover or enclose the bulb, or applying a coating that retards breakage and shattering.

GAP/GHP AUDIT CHECKLIST

QUESTION 3-25

Water not intended to be used in the packing process, such as hand-wash sink water, should be drained away from the processing area, and sanitary sewage lines should not leak.

GAP/GHP AUDIT CHECKLIST

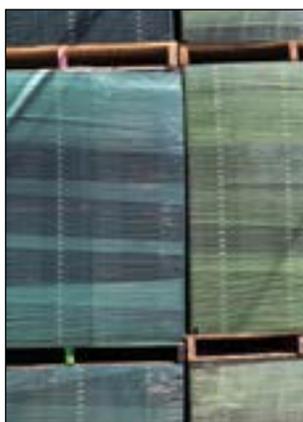
QUESTION 3-26

The packing house must have an SOP addressing how to manage product that has been unintentionally damaged or contaminated. This would include product opened after packing, or that has come into contact with the floor. If the farm policy states that product may be packed following contact with the floor, there must be a policy that indicates the procedures (e.g. washing) to minimize the risk of contamination to the product prior to packing. If the policy is to dispose of the contaminated product, then the method and location of disposal should be written clearly in the policy.

GAP/GHP CHECKLIST

QUESTIONS 3-27
THROUGH 3-29

Consistent with guidance provided in previous sections, the packing materials and boxes used in this phase of preparation of the product for market must either be new, single-use cardboard, or must be made of materials intended to be cleaned, sanitized and re-used. The farm's food safety plan must clearly indicate how the packing boxes, pallets and containers will be properly stored, used, and if applicable, cleaned and sanitized in order to minimize the risk of contamination.



Whether in a small packing shed or large scale packing house, it is important to store boxes up off the ground in a dry, clean location.

GAP/GHP AUDIT CHECKLIST

QUESTIONS 3-30
THROUGH 3-33

Pest Control

The concepts described in general housekeeping practices for the packing house will inform the development of SOPs and record-keeping for a written pest control plan. Your plan must show the steps taken to ensure that animals (including resident or family pets) and pests are excluded from the packing house. Some of the prevention strategies described above, such as holding your packing materials in a secure way so that pests cannot access them, and disposing of waste product so it doesn't become a pest attractant, are key components of a pest control plan.

In addition to implementing the prevention strategies - such as using bird deterrent tape, putting up screens, and setting traps - you must also document their implementation. You must maintain a written log with the date of inspection, results of the inspection, any corrective actions you've taken, and re-inspection of treated areas. A good practice is to flag or otherwise identify baits and traps in place, and to create a diagram of the facility showing the locations of the baits or traps. Any traps or baits that include the use of poison must be located outside the packing house. Only live traps or non-poison attractants are acceptable for use inside the packing house.

A good pest control program requires frequent monitoring in order to evaluate the effectiveness of the corrective actions taken, and to identify and correct for systemic problems if they are present. The auditor will need to review the documentation showing an adequate pest control plan is being implemented, monitored, and documented. This documentation may be handwritten log books, and could include date/time logs that are affixed to the traps with a sticker, or could be the records kept by a licensed pest control company that is contracted for the service. Service records will be required to be available for review during the audit.

The auditor will also examine the facility's interior walls, doors, floors and ceilings to ensure that, where necessary to prevent access by animals or other pests, any large cracks or crevices have been closed by appropriate blocking or repairs.



ON-FARM EXAMPLE



THIS FARM HAS MANY BARN SWALLOWS, and has developed a plan to deter the birds from entering the packing house in several ways. The entrance to the packing house has plastic strips to keep birds from flying in and out, but still allows food traffic and forklifts in and out. They also placed a decoy owl outside the packing house, along with signs that inform workers to keep doors and curtains closed to keep birds out. Note that there is also a rodent trap just outside the packing house door.

Traceability

The GAP standard for traceability is mandated by the Bioterrorism Act of 2002 which requires packing houses to have sufficient records in order to track produce “one step forward, one step back.”

A traceability program should reflect the unique practices of the farm and packing house. It should be included as part of the SOPs in the food safety plan, and be documented regularly so an auditor is able to easily review the plan, how it is being implemented, and whether it is sufficient to meet the standard for traceability in the event of a recall. Some of the documents that will capture the basic information include load tickets and field harvest records for product moving from the field to a packing house, plus invoices to the buyers which also include identifying information on the products sold and either delivered or picked up. A mock recall exercise must be completed at least annually.



Part 4

Storage and Transportation



Part 4 is generally applicable to farms seeking a Good Handling Practices (GHP) audit, which would cover storage and transportation facilities that are near the crop production areas, or co-located at the farm, but could also be remote from the production area. This includes farms or food hubs that may receive product from other farms and distribute out from there, as well.

This section covers product, containers and pallets, pest control, ice and refrigeration, transportation, worker health and hygiene, and traceability.



Storage Areas, Product, Containers, and Pallets

GOOD PRACTICES FOR CLEAN, ORDERLY WORK SPACES

Good management for food safety in a storage facility includes keeping the work space generally free of debris, trash, waste product or other non-essential equipment or supplies. Accumulations of soil or dirt should be removed, and the facility should establish a schedule for cleaning as often as needed to accommodate the volume of product, and the day-to-day practices of the facility.

If there is bulk storage of product, (e.g. crops like onions or potatoes, which may be stored on the floor or ground in warehouses or cellars), the auditor will verify that records are in place showing the bulk storage area has been cleaned, and it is inspected for foreign objects or other signs of contamination before use. This would not apply to product stored in bins, totes or other kinds of packages.

The product storage area should be protected from external sources of contamination, including wind-blown debris, rodents, and accumulations of rain-water. The grounds around the building or shed



Whether the product is moving into or out of storage, it must be protected from contamination while in transit. Make sure to keep packed product off the ground or floor at every stage, and use temporary holding areas that are either built facilities (left) or are reasonably shaded and protected from airborne contaminants (right). Mesh coverings are good for providing shaded areas for short term storage but is not sufficient for long-term storage.



FARMER QUESTION

If my hand-wash station is outdoors, do I need to collect the water and discard it?

Water should not run freely on the ground as workers' shoes and boots can track bacteria into storage areas or any adjacent packing or production areas. A gravel drainage pad may work, as long as it has capacity to soak up the water without creating pooling. If you need to catch the waste water and dump it, the dumping area should be away from the production or packing area and not a source of contamination to the irrigation water. The waste water should be dumped in an area that workers and visitors do not walk through when coming to and from the field or packing area.

should be free of excessive waste materials, and should not have evidence of standing water.

Rainfall or recent use of a hose could present evidence of standing water. Auditors will consider this when they review whether any standing water observed appears to be a one-time issue or whether it is evidence of an unresolved systemic problem. The facility supervisor should ensure that when water is spilled sufficient protection is in place (from barriers and drains) to ensure that the water does not accumulate and does not come into contact with, and potentially contaminate, the product.



This farm has a simple product transfer space that is open-air, but reasonably protected from impacts of wind and rain. The sloped gravel pad under the work space allows any waste water or rain accumulations to drain away from the work space, preventing contaminants from being tracked back into the facility on shoes and boots.

AUDITOR TIP



When you're reviewing the ways that waste water is managed on-site, remember that a good indication that there is a pattern of standing water is a greenish color to the water, indicating algae growth. This observation would cause you to review your drainage systems.

PRACTICES FOR CLEANING UP SPILLS OR ACCIDENTS

Any product that is spilled, accidentally opened, or comes into contact with the floor should be considered potentially contaminated. Just as with the House Packing section, the auditor will review your SOP on how to manage such situations. The SOP must describe the corrective action that will be taken, whether discarding the product (and how that will be done), or washing it before re-packing. The auditor will also observe whether your practices match your SOPs.

GAP/GHP AUDIT CHECKLIST

QUESTIONS 4-7



These single-use packing boxes are stored appropriately. The materials are off the ground, stacked and bundled on shelves that are not storing any other chemicals or other contaminants, and the material is protected from rain and wind. The re-useable totes shown are also an example of good practices. They are cleaned and sanitized on a regular schedule, and since the totes do not come into contact with the ground, they can be packed and stacked.

GAP/GHP AUDIT CHECKLIST

QUESTIONS 4-8
THROUGH 4-10

MAINTAINING CLEAN PACKING BOXES, PALLETS AND STORAGE BINS

As in a packing house or field packing operation, packing containers and other packing material should be stored and properly covered to prevent the possibility of contamination from water condensation, wind, rain, birds, rodents and other outside elements. An enclosed area for storage is a good practice. However, there are circumstances under which storing packing materials outdoors will meet the standards for audit. The auditor will review the on-site storage and usage practices to determine whether materials are adequately protected and monitored to manage the risk of contamination.

Packing containers should not be stored directly on the floor. Pallets used to keep containers off the floor or ground should be in good repair and clean. There should be no foreign material present on the pallets while being used.





When product is not in immediate use, e.g. it's prepared for transport to a buyer, it still needs to be protected from pests, dirt, water, and other contaminants. Large, clean, plastic bags can be used to loosely cover packed product (left), while custom-fit covers can be ordered that fit snugly on totes (right).

Pallets, pallet boxes, tote bags, and portable bins must be clean, in good condition and not contribute foreign material to the product. Containers holding ready-to-eat produce should be cleaned and/or sanitized. For product that was field-packed, it is important to consider cross-contamination—if containers were on the ground in the field and have dirt from the ground, they should not be stacked for storage. Best practice for field packing is to keep containers off the ground if they are to be stacked for transport or storage.

Product staged or temporarily stored outside in totes, trucks, bins, other containers or on the ground in bulk must be covered and protected from contamination.

PREVENTING CONTAMINATION FROM NON-FOOD SUBSTANCES

GAP/GHP AUDIT CHECKLIST

QUESTIONS
4-11 AND 4-12

Store any substances which are non-food grade in a way that will prevent them from contaminating the product if they spill or leak. If possible, these products will be segregated from the product in a cabinet or other storage unit, but there are other ways to store these products while also ensuring that product is protected from leaks and spills. Whatever system you use, remember that it must be included in your written food safety plan.

Machinery should be kept clean and well-maintained, which would include inspecting for possible fluid leaks, any broken implements, or other parts that could get deposited into the product. Machinery is assumed to get regular use, so an auditor will not consider a machine that shows signs of use as having failed the cleanliness standard. You must include an SOP and appropriate records to demonstrate cleaning practices for mechanical equipment.



Mechanical equipment will come into direct or at least close contact with the product. The machinery should be cleaned and maintained on a schedule that will keep it in good working condition.

Pest Control

QUESTIONS 4-13
THROUGH 4-16

You must establish and document a pest control program to reduce the risk of contamination from animals including rodents, birds, insects and others. The program may be run by you and your staff, or it can be provided by a commercial operator. A pest control program may include traps, screens, wind curtains, bird deterrent tape and other tools to discourage pests. When using traps and bait systems that require monitoring and maintenance, good practice is to number traps or bait stations and create a map or diagram of those, with traps identified by the code established.

Your pest control plan should include policies and procedures that prevent even your pets from accessing your storage and transportation staging areas, carts, trucks, and buildings and other enclosures.

Frequent monitoring is important to make sure your measures are effective in minimizing pests, and to identify any new pest intrusions that should be addressed. There must be a pest control log that includes dates of inspection, inspection report and steps that are taken to eliminate any problems. If you've elected to use a commercial provider of the service, the provider's records and documents showing the implementation of the established program must be available for the auditor to review.

Pests can also enter the facility through improperly maintained structures. Interior floors, ceilings and walls including doors, flooring and vents should be inspected for cracks, holes and other openings. Any identified risks should be properly blocked, repaired and/or sealed off.

A STORAGE FACILITY CAN BE ATTRACTIVE TO PESTS, from



rodents to migratory birds, and including resident cats, dogs and other family pets. Strategies for pest prevention include ensuring buildings are properly maintained, setting bait stations and traps, and keeping spaces free of debris and waste product. The owl statue and plastic curtains are good practices for preventing insect and bird intrusions. Traps should be monitored and documented regularly. Pests can also enter the facility through improperly maintained structures. Interior floors, ceilings and walls including doors, flooring and vents should be inspected for cracks, holes and other openings. Any identified risks should be properly blocked, repaired and/or sealed off.



Ice and Refrigeration

ICE AND COLD WATER USED FOR COOLING PRODUCE

Ice, like water, can be a carrier of many microorganisms, including pathogens that cause illness. Under certain circumstances even small amounts of contamination can result in food-borne illness. Ice or cold water used to cool the product must come from a potable water source (see Part 1 - Farm Review for information on potable water). The auditor will need to see test results on the source of water being used to cool produce or make ice (whether the ice is made on-site or is purchased from a vendor), and will need to review the testing records showing the water is potable.

GHP AUDIT CHECKLIST

QUESTIONS 4-17
AND 4-18



Water that contacts the product after harvest must be potable at first use, and must be treated to stay at a microbially safe level if it is re-used. Hoses, tables, conveyor belts and employees' hands all assist in delivering wash and cooling water, and each touch-point must be considered carefully in order to prevent the risk of contamination of the product at this critical point.

Ice-making equipment, tools used to handle or transport ice, and ice storage need to be cleaned and sanitized on a regular basis. Whether making ice on-site or purchasing from an outside supplier, you will need to provide records showing that there is a cleaning and sanitizing schedule for ice production, storage, and transportation. Make sure your plan includes equipment such as conveyors, belts and augers if they are used.



Making and storing ice requires that the source water be potable, and the machinery, storage, and tools are cleaned and sanitized on a regular schedule. Employee practices like washing hands and using gloves are good practices as ice is delivered to the product in the packing box. Remember to document these practices as part of your training.

COLD STORAGE

All cold storage spaces need to be monitored to

ensure that they are working well and that the temperature is appropriate for the produce being stored. Your SOP should make clear what temperatures are expected for storage of different products, and you will need to maintain temperature logs to demonstrate that the standards are being met. The auditor will observe cold rooms and review your written log showing regular monitoring to ensure the temperature is maintained appropriately to minimize the survival and replication of food-borne microbes.



QUESTIONS 4-19
THROUGH 4-23

Temperature probes or thermometers must be checked or calibrated on a regular basis, and the results must be recorded.

Refrigeration systems often drip water as a result of the humidity and temperature in the room. Your food safety plan should review and anticipate this. Product should not be stored under known dripping areas. Product stored near or under refrigeration equipment must be packed and protected so that if unanticipated dripping occurs the product will not be contaminated by that water.

If packed product is stacked on shelves, make sure that any iced product is on the bottom so that as the ice melts there is not potential for cross-contamination from dripping water that has been in contact with one product and could drip onto another.



Refrigerated storage can be a valuable tool to extend the freshness and life of the crop. Cold rooms must have proper attention to temperature, humidity, and cleanliness or they can become a source of contamination of the product.

Transportation and Loading

Cleanliness, temperature control, and minimizing cross-contamination are essential to maintaining the quality of produce. Everyone involved in transportation has a role to play to ensure that there isn't excessive risk of cross-contamination as a result of improper cleaning between loads, inappropriate combining of loads, or faulty temperature control during transportation. Communication between drivers and operators is essential to preventing contamination during transportation.

Trucks, carts, and other kinds of conveyances of the product should be regularly inspected for debris, trash, and foul odors. Transportation equipment should be cleaned on a regular schedule. Consider carefully the characteristics of the load a truck has hauled prior to your fresh product. Any contaminants left behind can be a source of contamination of your product. For example, if animals, animal products or non-food grade chemicals have been part of the previous load, ensure that cleaning regimes are sufficient to take care of residual contamination such as animal droppings, animal odors, or drips from containers. Making sure that inspection, cleaning, and sanitizing is done regularly, and the results recorded will help show the auditor that the operation is using good practices. The auditor will need to review your SOP on required cleaning of conveyances used to transport your product.

GAP/GHP AUDIT CHECKLIST

QUESTIONS 4-24
THROUGH 4-27

If the produce is going to be a partial load in a truck, you must ensure that the other products are not risks for contaminating your product. For instance, produce should not be shipped with meat, fish, or poultry, or with fertilizers, pesticides, or other chemicals.

If your product will be shipped by an outside party, you will need an SOP requiring shippers to ensure that the product is not loaded with other products that could contaminate your produce. Similarly, you must work with any transporter to ensure that temperature controls are maintained from loading to destination, appropriate to the products being shipped. Not all products require refrigeration, and it is okay for that to be part of your SOP.

Because damaged product is more susceptible to microbial contamination, loading practices should minimize the potential for damage to the product. Written SOPs must be in place indicating good loading practices to minimize product damage, including how you will convey this information to transportation partners, such as food hub operators and distributors.

Worker Health and Personal Hygiene

Staff lunchrooms, break rooms, and locker rooms must be clearly separated from storage, shipping, and receiving areas to prevent eating or taking breaks in the product areas. In a large facility this might be a separate room, and in a smaller operation it might just be a covered area or a designated area supplied with tables that is immediately outside the ordinary work area.

Some farms make it a policy to require hair and beard nets in order to prevent stray hair from getting into the product. If this is a written policy in their SOPs, the auditor will observe whether the policy is being followed by the staff.

There are a number of reasons that some facilities require employees to take off watches and jewelry during work hours. Watch bands can harbor microorganisms, rings and earrings can be dropped into the product, and all could present a risk for injury depending on the kind of machinery in use in the facility. If there is a written policy in your SOPs, the auditor will review the policy and observe whether the policy is being followed.

PATHOGENS OFTEN TRANSMITTED BY FOOD CONTAMINATED BY INFECTED EMPLOYEES

Pathogen	Symptoms
Hepatitis A virus	Fever, jaundice, vomiting
Salmonella species	Nausea, vomiting, diarrhea, fever
Shigella species	Diarrhea, fever, cramps
E. coli 0157:H7	Severe abdominal pain, watery diarrhea, vomiting
Staphylococcus aureus	Diarrhea, nausea, vomiting
Streptococcus pyogenes	Fever, Sore throat with fever

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Traceability

QUESTION 4-31

You must have a documented traceability system in place, and keep records of incoming and outgoing product with enough detail to allow you to trace the product “one step forward” and “one step back.” The company’s traceability plan will be written specifically to reflect the practices in place, and will be reviewed by the auditor to see that it provides sufficient detail to capture the source and the destination of the product.

THIS FARM RUNS ONLY PRODUCT

GROWN in its own fields through its packing facility and into its small, on-site cold storage. Products are identified by field number (e.g. “14” below), and by date, which are captured in a bar code on the sticker affixed to the outside of each packed box. During harvests of products where workers are paid by-the-piece, the identification labeling also includes who picked it. From harvest to packing, and cold storage through transportation, this numbering system makes it simple to track the product forward one step and back one step, which is required as part of a traceability plan.

ON-FARM EXAMPLE



GAP/GHP Audit

Resources

Full USDA GAP Audit Checklist

Organic/GAP Comparison Fact Sheet

GAP Audit Planning Process

Audit Request Form

Audit Agreement to Participate

**USDA Good Agricultural Practices Good Handling Practices
Audit Verification Checklist**



This program is intended to assess a participant's efforts to minimize the risk of contamination of fresh fruits, vegetables, nuts and miscellaneous commodities by microbial pathogens based on the U.S. Food and Drug Administration's "Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables," and generally recognized good agricultural practices.

Firm Name: _____

Contact Person: _____

Audit Site Address: _____

City: _____ **State:** _____ **Zip:** _____

Mailing Address: _____

City: _____ **State:** _____ **Zip:** _____

Telephone No: _____ **Fax:** _____

E-mail: _____

Auditor(s) (list all auditors with the lead listed first):

USDA or Fed-State Office performing audit: _____

Arrival Date: _____ **Time:** _____

Departure Date: _____ **Time:** _____

Travel Time _____

**Person(s)
Interviewed:**

Did the auditee participate in GAP & GHP training?

Yes No

Is there a map that accurately represents the farm operations?

Yes No N/A

Legal Description/GPS/Lat.&Long. of Location: _____

Are all crop production areas located on this audit site?

Yes No N/A

Total acres farmed (Owned, leased/rented, contracted, consigned): _____

Does the company have more than one packing facility?

Yes No N/A

Is there a floor plan of the packing house facility(s) indicating flow of product, storage areas, cull areas, employee break rooms, restrooms, offices?

Yes No N/A

Is any product commingled prior to packing?

Yes No

Audit Scope: (Please check all scopes audited)

General Questions (All audits must begin with and pass this portion)

Part 1 – Farm Review.....

Part 2 - Field Harvest and Field Packing Activities.....

Part 3 - House Packing Facility.....

Part 4 – Storage and Transportation.....

Part 5 – (Not Used)

Part 6 – Wholesale Distribution Center/Terminal Warehouse.....

Part 7 – Preventive Food Defense Procedures.....

Commodities:

Conditions Under Which an Automatic "Unsatisfactory" Will be Assessed

- An immediate food safety risk is present when produce is grown, processed, packed or held under conditions that promote or cause the produce to become contaminated.
- The presence or evidence of rodents, an excessive amount of insects or other pests in the produce during packing, processing or storage.
- Observation of employee practices (personal or hygienic) that have jeopardized or may jeopardize the safety of the produce.
- Falsification of records.
- Answering of Questions P1 or P2 as "NO".

Auditor Completion Instructions

- For clarification and guidance in answering these questions, please refer to the Good Agricultural Practices & Good Handling Practices Audit Verification Program Policy and Instruction Guide.
- Place the point value for each question in the proper column (Yes, No, or N/A).
- Gray boxes in the "N/A" column indicate that question cannot be answered "N/A".
- Any "N/A" or "No" designation must be explained in the comments section.
- The "Doc" column:
 - A "D" indicates that a document(s) is required to show conformance to the question. A document may be a combination of standard operating procedures outlining company policy as well as a record indicating that a particular action was taken.
 - A "R" indicates that a record is required to be kept showing an action was taken.
 - A "P" indicates that a policy/standard operating procedure (SOP) must be documented in the food safety plan in order to show conformance to the question.

General Questions

Implementation of a Food Safety Program

Questions		Points	Yes	NO	N/A	Doc
P-1	A documented food safety program that incorporates GAP and/or GHP has been implemented.					D
P-2	The operation has designated someone to implement and oversee an established food safety program. Name _____					D

Traceability

Questions		Points	Yes	NO	N/A	Doc
G-1	A documented traceability program has been established.	15				D
G-2	The operation has performed a "mock recall" that was proven to be effective.	10				R

Worker Health & Hygiene

Questions		Points	Yes	NO	N/A	Doc
G-3	Potable water is available to all workers.	10				R
G-4	All employees and all visitors to the location are required to follow proper sanitation and hygiene practices.	10				P
G-5	Training on proper sanitation and hygiene practices is provided to all staff.	15				D
G-6	Employees and visitors are following good hygiene/sanitation practices.	15				
G-7	Employees who handle or package produce are washing their hands before beginning or returning to work.	15				
G-8	Readily understandable signs are posted to instruct employees to wash their hands before beginning or returning to work.	10				
G-9	All toilet/restroom/field sanitation facilities are clean. They are properly supplied with single use towels, toilet paper, hand soap or anti-bacterial soap, and potable water for hand washing.	15				
G-10	All toilet/restroom/field sanitation facilities are serviced and cleaned on a scheduled basis.	10				R

Total Points earned for General Questions =

Total Possible = 180 *The total number of points possible for this section.*
Subtract "N/A" = _____ *Enter the additive number of N/A points (+points) here.*
Adjusted Total = _____ *Subtract the N/A points from the Total possible points*
X .8 (80%) *Multiply the Adjusted Total by .8 and show it as the*
Passing Score
Passing Score = _____

Pass **Fail** **(please mark one)**

This program is intended to assess a participant's efforts to minimize the risk of contamination of fresh fruits, vegetables, nuts and miscellaneous commodities by microbial pathogens based on the U.S. Food and Drug Administration's "Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables," and generally recognized good agricultural practices.

For further information regarding the USDA GAP & GHP Audit Program, please contact:

USDA Fruit and Vegetable Program, Specialty Crops Inspection Division, Audit Services Branch at 202-720-5021, or FVAudits@ams.usda.gov



Part 1 - Farm Review

Water Usage

(1-1) What is the source of irrigation water? (Pond, Stream, Well, Municipal, Other)

Please specify:

(1-2) How are crops irrigated? (Flood, Drip, Sprinkler, Other) Please specify:

Questions		Points	Yes	NO	N/A	Doc
1-3	A water quality assessment has been performed to determine the quality of water used for irrigation purpose on the crop(s) being applied.	15				D
1-4	A water quality assessment has been performed to determine the quality of water use for chemical application or fertigation method.	15				D
1-5	If necessary, steps are taken to protect irrigation water from potential direct and non-point source contamination.	15				

Sewage Treatment

Questions		Points	Yes	NO	N/A	Doc
1-6	The farm sewage treatment system/septic system is functioning properly and there is no evidence of leaking or runoff.	15				
1-7	There is no municipal/commercial sewage treatment facility or waste material landfill adjacent to the farm.	10				

Animals/Wildlife/Livestock

Questions		Points	Yes	NO	N/A	Doc
1-8	Crop production areas are not located near or adjacent to dairy, livestock, or fowl production facilities unless adequate barriers exist.	15				
1-9	Manure lagoons located near or adjacent to crop production areas are maintained to prevent leaking/overflowing, or measures have been taken to stop runoff from contaminating the crop production areas.	10				

Questions		Points	Yes	NO	N/A	Doc
1-10	Manure stored near or adjacent to crop production areas is contained to prevent contamination of crops.	10				
1-11	Measures are taken to restrict access of livestock to the source or delivery system of crop irrigation water.	10				
1-12	Crop production areas are monitored for the presence or signs of wild or domestic animals the entering the land.	5				R
1-13	Measures are taken to reduce the opportunity for wild and/or domestic animals from entering crop production areas.	5				R

Manure and Municipal Biosolids

Please choose one of the following options as it relates to the farm operations:

_____ Option A. Raw manure or a combination of raw and composed manure is used as a soil amendment.

_____ Option B. Only composted manure/treated municipal biosolids are used as soil amendments.

_____ Option C. No manure or municipal biosolids of any kind are used as soil amendments.

Only answer the following manure questions (questions 1-14 to 1-22) that are assigned to the Option chosen above. DO NOT answer the questions from the other two options. The points from the manure and municipal biosolids are worth 35 of a total 190 points, and answering questions from the other two options will cause the points to calculate incorrectly.

Option A: Raw Manure		Points	Yes	NO	N/A	Doc
1-14	When raw manure is applied, it is incorporated at least 2 weeks prior to planting or a minimum of 120 days prior to harvest.	10				R
1-15	Raw manure is not used on commodities that are harvested within 120 days of planting.	10				R
1-16	If both raw and treated manure are used, the treated manure is properly treated, composted or exposed to reduce the expected levels of pathogens.	10				R
1-17	Manure is properly stored prior to use.	5				

Option B: Composted Manure		Points	Yes	NO	N/A	Doc
1-18	Only composted manure and/or treated biosolids are used as a soil amendment.	10				R
1-19	Composted manure and/or treated biosolids are properly treated, composted, or exposed to environmental conditions that would lower the expected level of pathogens.	10				D
1-20	Composted manure and/or treated biosolids are properly stored and are protected to minimize recontamination.	10				
1-21	Analysis reports are available for composted manure/treated biosolids.	5				R
Option C: No Manure/Biosolids Used		Points	Yes	NO	N/A	Doc
1-22	No animal manure or municipal biosolids are used.	35				P

Soils

Questions		Points	Yes	NO	N/A	Doc
1-23	A previous land use risk assessment has been performed.	5				R
1-24	When previous land use history indicates a possibility of contamination, preventative measures have been taken to mitigate the known risks and soils have been tested for contaminants and the land use is commensurate with test results.	10				R
1-25	Crop production areas that have been subjected to flooding are tested for potential microbial hazards.	5				R

Traceability

Questions		Points	Yes	NO	N/A	Doc
1-26	Each production area is identified or coded to enable traceability in the event of a recall.	10				R

COMMENTS:						

USDA Good Agricultural Practices and Good Handling Practices
 Audit Verification Checklist

Total Points earned for Farm Review = _____

Total Possible = 190 *The total number of points possible for this section.*

Subtract "N/A" = _____ *Enter the additive number of N/A points (+points) here.*

Adjusted Total = _____ *Subtract the N/A points from the Total possible points*

X .8 (80%) *Multiply the Adjusted Total by .8 and show it as the Passing Score*

Passing Score = _____

Pass **Fail** **(please mark one)**

This program is intended to assess a participant's efforts to minimize the risk of contamination of fresh fruits, vegetables, nuts and miscellaneous commodities by microbial pathogens based on the U.S. Food and Drug Administration's "Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables," and generally recognized good agricultural practices.

Part 2 - Field Harvest and Field Packing Activities

Field Sanitation and Hygiene

Questions		Points	Yes	NO	N/A	Doc
2-1	A documented pre-harvest assessment is made on the crop production areas. Risks and possible sources of crop contamination are noted and assessed.	15				D
2-2	The number, condition, and placement of field sanitation units comply with applicable state and/or federal regulations.	10				
2-3	When question 2-2 is answered "N/A" (sanitation units are not required), a toilet facility is readily available for all workers.	10				
2-4	Field sanitation units are located in a location that minimizes the potential risk for product contamination and are directly accessible for servicing.	10				
2-5	A response plan is in place for the event of a major spill or leak of field sanitation units or toilet facilities.	10				P

Field Harvesting and Transportation

Questions		Points	Yes	NO	N/A	Doc
2-6	All harvesting containers and bulk hauling vehicles that come in direct contact with product are cleaned and/or sanitized on a scheduled basis and kept as clean as practicable.	10				D
2-7	All hand harvesting equipment and implements (knives, pruners machetes, etc.) are kept as clean as practical and are disinfected on a scheduled basis.	10				D
2-8	Damaged containers are properly repaired or disposed of.	5				
2-9	Harvesting equipment and/or machinery which comes into contact with product is in good repair.	10				
2-10	Light bulbs and glass on harvesting equipment are protected so as not to contaminate produce or fields in the case of breakage.	10				

USDA Good Agricultural Practices and Good Handling Practices
Audit Verification Checklist

Questions		Points	Yes	NO	N/A	Doc
2-11	There is a standard operating procedure or instructions on what measures should be taken in the case of glass/plastic breakage and possible contamination during harvesting operations.	5				P
2-12	There is a standard operating procedure or instructions on what measures should be taken in the case of product contamination by chemicals, petroleum, pesticides or other contaminating factors.	5				P
2-13	For mechanically harvested product, measures are taken during harvest to inspect for and remove foreign objects such as glass, metal, rocks, or other dangerous/toxic items.	5				
2-14	Harvesting containers, totes, etc. are not used for carrying or storing non-produce items during the harvest season, and farm workers are instructed in this policy.	5				P
2-15	Water applied to harvested product is microbially safe.	15				R
2-16	Efforts have been made to remove excessive dirt and mud from product and/or containers during harvest.	5				
2-17	Transportation equipment used to move product from field to storage areas or storage areas to processing plant which comes into contact with product is clean and in good repair.	10				
2-18	There is a policy in place and has been implemented that harvested product being moved from field to storage areas or processing plants are covered during transportation.	5				P
2-19	In ranch or field pack operations, only new or sanitized containers are used for packing the product.	10				D
2-20	Packing materials used in ranch or field pack operations are properly stored and protected from contamination.	10				
2-21	Product moving out of the field is uniquely identified to enable traceability in the event of a recall.	10				D

COMMENTS:

Total Points earned for Field Harvesting & Field Packaging = _____

Total Possible = 185 *The total number of points possible for this section.*

Subtract "N/A" = _____ *Enter the additive number of N/A points (+points) here.*

Adjusted Total = _____ *Subtract the N/A points from the Total possible points*

X .8 (80%) *Multiply the Adjusted Total by .8 and show it as the Passing Score*

Passing Score = _____

Pass **Fail** **(please mark one)**

This program is intended to assess a participant's efforts to minimize the risk of contamination of fresh fruits, vegetables, nuts and miscellaneous commodities by microbial pathogens based on the U.S. Food and Drug Administration's "Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables," and generally recognized good agricultural practices.

Part 3 - HOUSE PACKING FACILITY

Receiving

Questions		Points	Yes	NO	N/A	Doc
3-1	Product delivered from the field which is held in a staging area prior to packing or processing is protected from possible contamination.	5				
3-2	Prior to packing, product is properly stored and/or handled in order to reduce possible contamination.	5				

Washing/Packing Line

Questions		Points	Yes	NO	N/A	Doc
3-3	Source water used in the packing operation is potable.	15				R
3-4	If applicable, the temperature of processing water used in dump tanks, flumes, etc., is monitored and is kept at temperatures appropriate for the commodity.	10				D
3-5	Processing water is sufficiently treated to reduce microbial contamination.	10				D
3-6	Water-contact surfaces, such as dump tanks, flumes, wash tanks and hydro coolers, are cleaned and/or sanitized on a scheduled basis.	10				D
3-7	Water treatment (strength levels and pH) and exposure time is monitored and the facility has demonstrated it is appropriate for the product.	10				D
3-8	Food contact surfaces are in good condition; cleaned and/or sanitized prior to use and cleaning logs are maintained.	15				D
3-9	Product flow zones are protected from sources of contamination.	10				
3-10	The water used for cooling and/or making ice is potable.	15				R
3-11	Any ice used for cooling produce is manufactured, transported and stored under sanitary conditions.	10				R

Packing House Worker Health & Hygiene

Questions		Points	Yes	NO	N/A	Doc
3-12	Employee facilities (locker rooms, lunch and break areas, etc.) are clean and located away from packing area.	10				
3-13	When there is a written policy regarding the use of hair nets/beard nets in the production area, it is being followed by all employees and visitors.	5				P
3-14	When there is a written policy regarding the wearing of jewelry in the production area, it is being followed by all employees and visitors.	5				P

Packing House General Housekeeping

Questions		Points	Yes	NO	N/A	Doc
3-15	Only food grade approved and labeled lubricants are used in the packing equipment/machinery.	10				R
3-16	Chemicals not approved for use on product are stored and segregated away from packing area.	10				
3-17	The plant grounds are reasonably free of litter and debris.	5				
3-18	The plant grounds are reasonably free of standing water.	5				
3-19	Outside garbage receptacles/dumpsters are closed or are located away from packing facility entrances and the area around such sites is reasonably clean.	5				
3-20	Packing facilities are enclosed.	5				
3-21	The packing facility interior is clean and maintained in an orderly manner.	5				
3-22	Floor drains appear to be free of obstructions.	5				
3-23	Pipes, ducts, fans and ceilings which are over food handling operations, are clean.	5				
3-24	Glass materials above product flow zones are contained in case of breakage.	10				
3-25	Possible wastewater spillage is prevented from contaminating any food handling area by barriers, drains, or a sufficient distance.	10				
3-26	There is a policy describing procedures which specify handling/disposition of finished product that is opened, spilled, or comes into contact with the floor.	15				P

Questions		Points	Yes	NO	N/A	Doc
3-27	Only new or sanitized containers are used for packing the product.	10				D
3-28	Pallets and containers are clean and in good condition.	5				
3-29	Packing containers are properly stored and protected from contamination (birds, rodents, and other pests).	10				

Pest Control

Questions		Points	Yes	NO	N/A	Doc
3-30	Measures are taken to exclude animals or pests from packing and storage facilities.	10				D
3-31	There is an established pest control program for the facility.	10				D
3-32	Service reports for the pest control program are available for review.	5				R
3-33	Interior walls, floors and ceilings are well maintained and are free of major cracks and crevices.	5				

Traceability

Questions		Points	Yes	NO	N/A	Doc
3-34	Records are kept recording the source of incoming product and the destination of outgoing product which is uniquely identified to enable traceability.	10				D

COMMENTS:						

USDA Good Agricultural Practices Good Handling Practices
 Audit Verification Checklist

Total Points earned for House Packing Facility = _____

Total Possible = 290 *The total number of points possible for this section.*

Subtract "N/A" = _____ *Enter the additive number of N/A points (+points) here.*

Adjusted Total = _____ *Subtract the N/A points from the Total possible points*

X .8 (80%) *Multiply the Adjusted Total by .8 and show it as the Passing Score*

Passing Score = _____

Pass **Fail** **(please mark one)**

This program is intended to assess a participant's efforts to minimize the risk of contamination of fresh fruits, vegetables, nuts and miscellaneous commodities by microbial pathogens based on the U.S. Food and Drug Administration's "Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables," and generally recognized good agricultural practices.

Part 4 - STORAGE AND TRANSPORTATION

Product, Containers & Pallets

Questions		Points	Yes	NO	N/A	Doc
4-1	The storage facility is cleaned and maintained in an orderly manner.	5				
4-2	Bulk storage facilities are inspected for foreign material prior to use and records are maintained.	5				R
4-3	Storage rooms, buildings, and/or facilities are maintained and sufficiently sealed or isolated and are protected from external contamination.	10				
4-4	Storage grounds are reasonably free of litter and debris.	5				
4-5	Floors in storage areas are reasonably free of standing water.	5				
4-6	Possible wastewater spillage is prevented from contaminating any food handling area by barriers, drains, or sufficient distance.	10				
4-7	There is a policy describing procedures which specify handling/disposition of finished product which is opened, spilled, or comes into contact with the floor.	15				P
4-8	Packing containers are properly stored and sufficiently sealed, to be protected from contamination (birds, rodents, pests, and other contaminants).	10				
4-9	Pallets, pallet boxes, tote bags, and portable bins, etc. are clean, in good condition and do not contribute foreign material to the product.	5				
4-10	Product stored outside in totes, trucks, bins, other containers or on the ground in bulk is covered and protected from contamination.	10				
4-11	Non-food grade substances such as paints, lubricants, pesticides, etc., are not stored in close proximity to the product.	10				
4-12	Mechanical equipment used during the storage process is clean and maintained to prevent contamination of the product.	5				D

Pest Control

Questions		Points	Yes	NO	N/A	Doc
4-13	Measures are taken to exclude animals or pests from storage facilities.	10				D
4-14	There is an established pest control program for the facility.	10				D
4-15	Service reports for the pest control program are available for review.	5				R
4-16	Interior walls, floors, and ceilings are well-maintained and are free of major cracks and crevices.	5				

Ice & Refrigeration

Questions		Points	Yes	NO	N/A	Doc
4-17	The water used for cooling and/or making ice is potable.	15				R
4-18	Manufacturing, storage, and transportation facilities used in making and delivering ice used for cooling the product have been sanitized.	10				R
4-19	Climate-controlled rooms are monitored for temperature and logs are maintained.	5				D
4-20	Thermometer(s) are checked for accuracy and records are available for review.	5				D
4-21	Refrigeration system condensation does not come in contact with produce.	10				
4-22	Refrigeration equipment (condensers, fans, etc.) is cleaned on a scheduled basis.	10				D
4-23	Iced product does not drip on pallets of produce stored below.	10				

Transportation

Questions		Points	Yes	NO	N/A	Doc
4-24	Prior to the loading process, conveyances are required to be clean, in good physical condition, free from disagreeable odors, and from obvious dirt/debris.	10				P
4-25	Produce items are not loaded with potentially contaminating products.	10				P
4-26	Company has a written policy for transporters and conveyances to maintain a specified temperature(s) during transit.	10				P
4-27	Conveyances are loaded to minimize damage to product.	5				P

Worker Health and Personal Hygiene

Questions	Points	Yes	NO	N/A	Doc
4-28 Employee facilities (locker rooms, lunch and break areas, etc.) are clean and located away from storage, shipping, and receiving areas.	10				
4-29 When there is a written policy regarding the use of hair/beard nets in the storage and transportation areas, it is being followed by all affected employees and visitors.	5				P
4-30 When there is a written policy restricting the wearing of jewelry in the storage and transportation areas, it is being followed by all affected employees and visitors.	5				P

Traceability

Questions	Points	Yes	NO	N/A	Doc
4-31 Records are kept regarding the source of incoming product and the destination of outgoing product which is uniquely identified to enable traceability.	10				D

COMMENTS:

Total Points earned for Storage & Transportation = _____

Total Possible = 255 *The total number of points possible for this section.*

Subtract "N/A" = _____ *Enter the additive number of N/A points (+points) here.*

Adjusted Total = _____ *Subtract the N/A points from the Total possible points*

X .8 (80%) *Multiply the Adjusted Total by .8 and show it as the Passing Score*

Passing Score = _____

Pass **Fail** **(please mark one)**

This program is intended to assess a participant's efforts to minimize the risk of contamination of fresh fruits, vegetables, nuts and miscellaneous commodities by microbial pathogens based on the U.S. Food and Drug Administration's "Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables," and generally recognized good agricultural practices.

Part 6-Wholesale Distribution Center/Terminal Warehouses

Receiving

Questions		Points	Yes	NO	N/A	Doc
6-1	All companies that supply fresh produce are required to have passed a third party audit verification of GAP and/or GHP.	15				D
6-2	Upon receiving, conveyances are required to be clean, in good physical condition and free from obvious objectionable odors, dirt and/or debris at time of unloading.	10				P
6-3	Company does not accept produce items that are loaded with or are not protected from potentially contaminating products.	10				P
6-4	Refrigerated commodities are monitored for temperatures at the time of receiving.	5				R
6-5	The company has a written policy regarding the disposition of product when temperatures are not within the company's guidelines at the time of receiving.	5				P

Storage Facility/Temperature Control

Questions		Points	Yes	NO	N/A	Doc
6-6	The facility is clean and maintained in an orderly manner.	5				
6-7	Refrigerated rooms are monitored for temperature and logs are maintained.	5				D
6-8	Thermometer(s) are checked for accuracy and records are available for review.	5				D
6-9	Refrigeration system condensation does not come into contact with produce.	10				
6-10	Refrigeration equipment (condensers, fans, etc.) is cleaned on a scheduled basis.	10				D
6-11	Iced product does not drip on pallets of produce stored below.	10				
6-12	The water used for cooling/ice is potable.	10				R
6-13	Manufacturing, storage, and transportation facilities used in making and delivering ice used for cooling the product are sanitized on a scheduled basis.	10				D
6-14	There is a policy describing procedures which specify handling/disposition of finished product which is opened, spilled, or comes into contact with the floor.	15				P

Questions		Points	Yes	NO	N/A	Doc
6-15	Product flow zones are protected from sources of contamination.	10				
6-16	Glass materials above product flow zones are contained in case of breakage.	10				
6-17	The grounds are reasonably free of litter and debris.	5				
6-18	The grounds are reasonably free of standing water.	5				
6-19	Outside garbage receptacles/dumpsters are closed or are located away from facility entrances and the area around such sites is reasonably clean.	5				
6-20	The facility is enclosed.	5				
6-21	Floor drains appear to be free of obstructions.	5				
6-22	Pipes, ducts, fans, and ceilings in the facility are reasonably clean.	5				
6-23	Possible wastewater spillage is prevented from contaminating any food storage or handling area by barriers, drains, or a sufficient distance.	10				
6-24	Non-food grade substances such as paints, lubricants, pesticides, etc., are not stored in close proximity to the product.	10				

Pest Control

Questions		Points	Yes	NO	N/A	Doc
6-25	Measures are taken to exclude animals or pests from the facility.	10				D
6-26	There is an established pest control program for the facility.	10				D
6-27	Service reports for the pest control program are available for review.	5				R
6-28	Interior walls, floors and ceilings are well-maintained and free of major cracks and crevices.	5				

Repacking/Reconditioning

(6-29) Does the facility repack and/or recondition product?

YES NO (please mark one)

If the answer to question 6-29 is YES, answer questions 6-30 through 6-41. If the answer for question 6-29 is NO, then questions 6-30 through 6-41 are answered N/A.

Questions		Points	Yes	NO	N/A	Doc
6-30	Repacking/reconditioning processes are confined to an established location in the facility.	5				P
6-31	Food contact surfaces are in good condition; cleaned and/or sanitized prior to use and cleaning logs are maintained.	15				D
6-32	Source water used in the repacking operation is potable.	15				R
6-33	Processing water is sufficiently treated to reduce microbial contamination.	10				D
6-34	Water treatment (strength levels and pH) and exposure time is monitored and is appropriate for product.	10				D
6-35	If applicable, the temperature of processing water used in dump tanks, flumes, etc., is monitored and is kept at temperatures appropriate for the commodity.	10				D
6-36	Any ice used for cooling produce is manufactured, transported and stored under sanitary conditions.	10				R
6-37	Water used for chilling and/or to make ice is potable.	15				R
6-38	Only food grade approved and labeled lubricants are used in the repacking equipment/machinery.	10				D
6-39	Only new or sanitized containers are used for product repacking.	10				P
6-40	Pallets and other containers are clean and in good condition.	5				
6-41	Packing containers are properly stored and protected from contamination (birds, rodents, and other pests, etc.).	10				

Worker Health and Personal Hygiene

Questions		Points	Yes	NO	N/A	Doc
6-42	Employee facilities (locker rooms, lunch and break areas, etc.) are clean and located away from repack and storage area.	10				
6-43	When there is a written policy regarding the use of hair nets/beard nets in the facility, it is being followed by all affected employees and visitors.	5				P

Questions		Points	Yes	NO	N/A	Doc
6-44	When there is a written policy restricting the wearing of jewelry in the facility, it is being followed by all affected employees and visitors.	5				P

Shipping/Transportation

Questions		Points	Yes	NO	N/A	Doc
6-45	Prior to the loading process, conveyances are required to be clean, in good physical condition, free from disagreeable odors and from obvious dirt/debris.	10				P
6-46	Produce items are not loaded with potentially contaminating products.	10				P
6-47	Company has a written policy for transporters and conveyances to maintain a specified temperature(s) range during transit.	10				P

Traceability

Questions		Points	Yes	NO	N/A	Doc
6-48	Records are kept recording the source of incoming product and the destination of outgoing product which is uniquely identified to enable traceability.	10				D

COMMENTS:

Part 7 - Preventive Food Defense Procedures

Based on the U.S. Food and Drug Administration's Food Producers, Processors, and Transporters:
 Food Security Preventive Measure Guidance for Industry.

Secure Employee/Visitor Procedures

Questions		Points	Yes	NO	N/A	Doc
7-1	The company has a documented food defense plan and a person has been designated to oversee it. Name: _____	5				D
7-2	Food defense training has been provided to all employees.	5				D
7-3	Employees are aware of whom in management they should contact about potential security problems/issues. Name of management representative: _____	5				
7-4	Visitors are required to check in (showing proof of identity) and out, when entering/leaving the facility.	5				D
7-5	The purpose of visitation to site is verified before admittance to the facility.	5				D
7-6	Visitors are prohibited from the packing/storage areas unless accompanied by an employee.	5				D
7-7	Incoming and outgoing employee and visitor vehicles to and from the site are subject to inspection.	5				D
7-8	Parked vehicles belonging to employees and visitors display a decal or placard issued by the facility.	5				
7-9	Staff is prohibited from bringing personal items into the handling or storage areas.	5				D
7-10	Staff access in the facility is limited to the area of their job function and unrestricted areas.	5				D
7-11	Management is aware of which employee should be on the premises, and the area they are assigned to.	5				D
7-12	A system of positive identification of employees has been established and is enforced.	5				

Secure Facility Procedures

Questions		Points	Yes	NO	N/A	Doc
7-13	Uniforms, name tags, or identification badges are collected from employees prior to the termination of employment.	5				D
7-14	The mailroom is located away from the packing/storage facilities.	5				
7-15	Computer access is restricted to specific personnel.	5				D
7-16	A system of traceability of computer transactions has been established.	5				
7-17	A minimum level of background checks has been established for all employees.	5				D
7-18	Routine security checks of the premises are performed for signs of tampering, criminal or terrorist activity.	5				D
7-19	Perimeter of facility is secured by fencing or other deterrent.	5				
7-20	Checklists are used to verify the security of doors, windows, and other points of entry.	5				D
7-21	All keys to the establishment are accounted for.	5				D
7-22	The facility has an emergency lighting system.	5				
7-23	The facility is enclosed.	5				
7-24	Storage or vehicles/containers/trailers/railcars that are not being used are kept locked.	5				
7-25	Delivery schedules have been established.	5				
7-26	The off-loading of incoming materials is supervised.	5				
7-27	The organization has an established policy for rejecting deliveries.	5				D
7-28	Unauthorized deliveries are not accepted.	5				D
7-29	The company does not accept returned (empty) containers for packing of product unless they are sanitized containers intended for reuse.	5				D
7-30	The facility has a program in place to inspect product returned to the facility for tampering.	5				D
7-31	The company has identified the individual(s), with at least one backup, who are responsible for recalling the product.	5				D
7-32	The company has performed a successful mock recall of product to the facility.	5				D

**Total Points earned for Preventative Food Defense
Procedures =** _____

Total Possible = 180 *The total number of points possible for this section.*

Subtract "N/A" = _____ *Enter the additive number of N/A points (+points) here.*

Adjusted Total = _____ *Subtract the N/A points from the Total possible points*

X .8 (80%) *Multiply the Adjusted Total by .8 and show it as the
Passing Score*

Passing Score = _____

Pass **Fail** **(please mark one)**



Facility Name (Print) as it should appear on Certificate: _____

Street Address (Print):	City (Print):	State (Print):	Zip (Print):
e-mail Address (Print):	Fax number:	Date Audit Requested:	Date of Previous Audit:
Date Audit Began:	Date Audit Completed:	USDA Commodity Procurement Audit? Check One Yes <input type="checkbox"/> No <input type="checkbox"/>	
Time Audit Began:	Time Audit Completed:		

EVALUATION ELEMENTS

Scopes Requested	Element	Possible Points	Less N/A Points	Adjusted Points	Passing Score*	Facility Score	Pass	Fail	Date Passed	General Questions	Reviewing Official	Unannounced
X	General Questions	180										
	Part 1 – Farm Review	190										
	Part 2 – Field Harvesting & Field Packing Activities	185										
	Part 3 – House Packing Facility	290										
	Part 4 – Storage and Transportation	255										
	Part 6 – Wholesale Distribution Center/ Warehouses	410										
	Part 7 – Preventative Food Defense Procedures	180										

*A Passing Score is 80% of the Possible Points, or the Adjusted Points if adjustments are necessary, with no "automatic unsatisfactory" conditions.

Commodities: _____

Send completed GAP&GHP Certificate to: (choose one) _____ Inspection office: (list office) _____ Directly to auditee above: _____

Lead Auditor Name (Print): _____ Signature & _____ Date: _____

Duty Station: _____ All Scopes Completed: _____

For USDA HQ use: _____

Reviewing Official Name (Print): _____ Date: _____

Signature: _____

To verify a company's continued good standing in the USDA GAP&GHP Program please visit <http://www.ams.usda.gov/gapghp>

Revised September 1, 2014
 USDA, AMS, FV, SCI Division
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USDA Good Agricultural Practices and Good Handling Practices Post-harvest - USDA Checklist

USDA, AMS, Fruit and Vegetable Program Good Agricultural Practice & Good Handling Practices CORRECTIVE ACTION REPORT	Report #: _____ of _____
Company Name/Farm: _____	Date: _____
Lead Auditor: _____	
Crops(s): _____	
Description of Non Conformity:	
Notified company staff at time of finding non-conformity (Yes or No): _____	
Checklist question number and/or section of auditee food safety plan associated with non-conformity: _____	
Corrective Action Proposed and Time Frame for Implementation: <i>(Attach separate sheet if necessary)</i>	
Company Representative Signature: _____	
<i>Signature affirms statements concerning Non-Conformity, Corrective Action, and Implementation are correct.</i>	
Auditor signature for acceptance of proposed corrective action and timetable for implementation: _____	

Top portion for AUDITOR USE ONLY; bottom portion for Company and Auditor use.



Washington State Dept. of Agriculture Organic Food Program

Certification Fact Sheet

Organic and Good Agricultural Practices (GAP)

Washington State Dept. of Agriculture (WSDA) Organic Program is authorized by USDA to certify operations according to the USDA National Organic Standards. WSDA Fruit and Vegetable Program offers a GAP auditing service to allow you to demonstrate to customers that you are following USDA's Good Agricultural Practices (GAP) for on-farm food safety. A Good Handling Practices (GHP) audit is also available to confirm that handling and processing are done in accordance with USDA GHP standards.

Organic certification is required in order to sell, label, or represent a crop as "organic." Operations are certified based on the type of business and the products that they want to market with an organic claim (crops, livestock, handling or processing). GAP audits are voluntary, but may be required to gain access to certain markets. An operation may choose to be certified for any or all of the scopes that apply to the operation; the GAP auditor will evaluate only those sections of your operation that you have specifically requested to have audited.

As with organic certification's system plan, GAP is structured around implementation of standard operating procedures and requires thorough recordkeeping. While organic standards require operations to prevent contamination of organic crops from prohibited input materials and prevent commingling of organic and nonorganic products, GAP certification ensures that the operation is following practices to minimize the risk of microbial contamination of crops. Both regulations cover practices from planting through harvest, packing, storage and transportation.

If you run a certified organic farm and are looking to expand your marketing options with GAP certification, consider that you are probably already implementing a system that could easily be adapted to meet GAP requirements. You may even be keeping some of the records required by GAP. A basic comparison of Organic and GAP requirements is outlined in this factsheet. This list is not an all-inclusive list of requirements, but instead a useful starting point in evaluating if GAP certification is right for you.



	Organic	USDA Organic Regulation	GAP	USDA GAP/GHP Audit Checklist
Traceability	Begins with seeds, ends with product distribution. Records must be maintained regarding all activities and transactions.	§205.103	Begins in planting field and ends with buyer “one step forward, one step back”.	General Question G-1
Mock Recall	Not required	None	The operator must conduct mock recall 12 months or less prior to GAP audit, or during the audit itself.	General Question G-2
Water Analysis	Analysis not specifically required. However, producer must ensure no prohibited material contamination of crops via irrigation water and must ensure organic practices do not contribute to contamination of water by plant nutrients, pathogenic organisms, heavy metals, or residues of prohibited substances.	§205.202 §205.203	The operation must have a water risk assessment in place.	General Question G-3; Part 1 Farm Review 1-3 and 1-4
Land Use Risk Assessment	Not required, but land must be free of prohibited materials for three years prior to the harvest of the first organic crop.	§205.202	The operation must document a previous land use risk assessment.	Part 1 Farm Review 1-23
Raw Manure Management	Raw manure must be composted unless it is applied to land used for a crop not intended for human consumption or is incorporated into the soil not less than 90 or 120 days prior to harvest (depending on crop).	§205.203(1)	Raw manure must be incorporated at least two weeks prior to planting and at least 120 days prior to harvest. Cannot be applied to crops harvested within 120 days of planting.	Part 1 Farm Review 1-14 through 1-21
Biosolids	Prohibited	§205.105 §205.203(e)(2)	Biosolids are allowed with proper management.	Part 1 Farm Review 1-18 through 1-21
Lot Numbers	Lot numbers recommended.	205.307(b)	Lot numbers recommended.	General Question G-1, Part I Farm Review 1-26, Part 2 Field Harvest & Packing 2-21

	Organic	USDA Organic Regulation	GAP	USDA GAP/ GHP Audit Checklist
Packing Shed Pest Control	Records must be maintained to verify preventative practices are in place prior to use of an input. Records must verify prohibited materials have not contaminated organic products.	§205.103 §205.271	An animal and pest exclusion plan must be maintained, and records and inspection reports must be available for review.	Part 3 House Packing Facility 3-30 - 3-32; Part 4 Storage and Transportation 4-14 & 4-15
Financial Records	Records regarding all activities and transactions related to organic products must be maintained.	§205.103	Financial records are not required.	None
Storage Records	Records regarding all activities and transactions related to organic products must be maintained, and must verify organic products are not contaminated or commingled during storage.	§205.103	Routine sanitation records are required.	Part 4 Storage & Transportation 4-19 through 4-22
Transport	Records must be maintained to verify organic products are not contaminated or commingled during transportation, this includes transportation by 3 rd party.	§205.103 §205.272	Routine sanitation records, along with a plan for transport temperature control, odor control, and cleanliness are required.	Part 4 Storage & Transportation 4-24 through 4-27
Does my certificate expire?	Certification does not expire unless the operation surrenders their certificate or it is suspended or revoked by a certifier. Annual recertification is required.	§205.404 §205.406	Certificates are granted annually after a successful audit. An immediate food safety risk identified at time of audit or through an unannounced visit can result in revocation of certification.	None

For Organic Certification questions or application forms:

Washington State Department of Agriculture
Organic Food Program
PO Box 42560; 1111 Washington Street SE
Olympia, WA 98504-2560
(360) 902-1805, organic@agr.wa.gov
<http://agr.wa.gov/foodanimal/organic>

For GAP questions or application forms:

Washington State Department of Agriculture
Organic Food Program
PO Box 42560; 1111 Washington Street SE
Olympia, WA 98504-2560
Yakima District Office: (509) 249-6900
Wenatchee District Office: (509) 662-6161
<http://agr.wa.gov/Inspection/FVInspection/GAPGHP.aspx>

Resources:

USDA National Organic Program (USDA NOP) and links to the USDA organic regulations
Phone: 202-720-3252

<http://www.ams.usda.gov/AMSv1.0/nop>

WSDA Bridging the GAPS
Education and Outreach about USDA GAP/GHP Audit Program in Washington State
GAPedu@agr.wa.gov
<http://agr.wa.gov/Inspection/GAPGHP/>



TABLE 3 GAP Audit Planning Process





UNITED STATES DEPARTMENT OF AGRICULTURE
 Agricultural Marketing Service
 Fruit and Vegetable Programs
 Fresh Products Branch

REQUEST FOR AUDIT SERVICES

(This is the only acceptable form for fax or electronic submission to USDA for audit requests)

NOTE: Fill in all appropriate blocks. Requested services may be delayed because of incomplete information. Type of service requested must be selected below.

DATE OF REQUEST:		ANTICIPATED DATE OF AUDIT:	
-------------------------	--	-----------------------------------	--

AUDITEE INFORMATION		FARM / FACILITY INFORMATION	
Company Name:		Location:	
Street Address:			
City, State & Zip:		Total Acres / Total Sq Feet to be audited:	
Phone Number:			
Contact Person:			

APPLICANT INFORMATION		COMMODITIES TO BE COVERED BY AUDIT (Please List)	
Company Name			
Phone Number:			
Fax Number:			
E-mail:			
Contact Person:			

TYPE OF AUDIT SERVICES REQUESTED

Type of Audit(s) Requested (Please choose at least one)	Scope of GAP&GHP Audit (Please choose all that apply)
<input type="checkbox"/> Good Agricultural Practices & Good Handling Practices (GAP&GHP) (Select Audit Scopes)	<input type="checkbox"/> Part 1 – Farm Review
<input type="checkbox"/> Mushroom Specific GAP Audit (M-GAP)	<input type="checkbox"/> Part 2 – Field Harvest & Field Packing Activities
<input type="checkbox"/> Tomato Audit Protocol (T-GAP)	<input type="checkbox"/> Part 3 – House Packing Facility
<input type="checkbox"/> Leafy Greens Audit (LGMA)	<input type="checkbox"/> Part 4 – Storage & Transportation
<input type="checkbox"/> Identity Preservation Audit (IP)	<input type="checkbox"/> Part 6 – Wholesale Distribution Center / Terminal Warehouse
<input type="checkbox"/> Other, Specify: _____	<input type="checkbox"/> Part 7 – Preventative Food Defense Procedures

ADDITIONAL REMARKS	
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To download a copy of the USDA Good Agricultural Practices & Good Handling Practices audit checklist, please visit the USDA website at <http://www.ams.usda.gov/gapghp>.

Once a request has been received, a USDA representative will make contact within 48 hours of receipt to schedule the audit.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0125. The time required to complete this information collection is estimated average .02 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202)720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800)795-3272 (voice) or (202)720-6382 (TDD). USDA is an equal opportunity provider and employer.



UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service
Fruit and Vegetable Program

Good Agricultural Practice & Good Handling Practices Audit Program (GAP&GHP)
Identity Preservation Program (IP)
Partners in Quality Audit Program (PIQ)
& Other Audit Programs

AGREEMENT FOR PARTICIPATION IN AUDIT VERIFICATION PROGRAMS

Company Information

I _____ a duly authorized representative of
(Insert Name)

(Name of Company)

(Street Address, City, State, and Zip Code)

hereinafter referred to as the applicant, do hereby agree to be audited under the a voluntary USDA, AMS, Specialty Crops Inspection Division audit program. The audit shall include verification of the company's farm(s), packing facilities, storage facilities, wholesale distribution centers or other locations as applicable to the audit scope(s).

1. The applicant agrees that with respect to:

- a. **Laws, Regulation, Statutes** - To conform with all applicable Federal, State, and local government laws, regulations, or statutes, including, but not limited to: Regulations Governing Inspection and Certification of Fruits and Vegetables and Related Products (7 CFR, Part 52), any other pertinent regulations, and any such instructions covering inspection and certification of the products and verification of the processes as may be issued by AMS.
- b. **Audit Request** - To contact and schedule the audit with the appropriate federal or federal-state inspection office (using the FV-237A form). The request for the initial audit will be made no later than two (2) weeks prior to the end of the growing/harvesting/packing season.
- c. **Records** - To maintain all records required by the specific audit program including, but not limited to, quality manual, food safety manual, water test results, employee training records, manure use records, laboratory testing results and other records as required by the quality manual, food safety manual or specific audit program requirements. The applicant shall make these records available to USDA federal and/or federal-state auditors.
- d. **Access to Facilities** - To grant permission for AMS authorized personnel to enter any and all farms and/or facilities covered by the specific audit program for the purposes of conducting the audit. This includes the initial audit and any unannounced audits as may be required by the program.
- e. **Payment** - To pay by credit card, check, draft, or money order drawn to the order of the appropriate federal or federal-state agency for the services covered herein on or before the due date specified on the billing statement. Charges for GAP&GHP audits include, but are not limited to, the audit fee as listed in the fee schedule or Federal Register and travel expenses for the initial audit and any unannounced audits as may be required by the program.

2. AMS agrees that with respect to:

- a. **Perform Audit** – To provide objective third-party verification of the applicant's specific audit program using internationally recognized audit principles.
- b. **Opening & Exit Interviews** - To discuss the audit prior to and report the results and observations with the applicant after each audit and provide a timeframe in which a copy of the completed audit report or checklist will be provided.
- c. **Reports** - To issue to the applicant reports of all audits and evaluations of the applicant's specific audit program and provide written notification of any deficiencies found, if any.
- d. **Confidentiality** - To consider and treat any trade secrets or confidential information as proprietary and confidential. To consider any records and related information provided to AMS as information that is voluntarily submitted to AMS because of their participation in the specific audit program.
- e. **Issuance of Certificate, Posting and Sharing Audit Results** - To issue a certificate to the applicant and to post audit results to the USDA website, (with the exception of the Preventative Food Defense Procedures scope), only when the applicant receives at least the minimum passing score for each scope being audited. To provide the specific applicant checklist and results of individual questions to other parties only at the written request of the applicant. NOTE: Reports containing a compilation of generic audit information may be shared with the Food and Drug Administration. Any personal information linking the audit results to the auditee shall be redacted prior to issuance.

3. It is mutually agreed that with respect to:

- a. Length of Service** - That the audit results for GAP&GHP audits are valid for one year from the date of the initial audit, provided that at least the minimum score is achieved on both the initial audit and any unannounced audits that may be required by the program. For all other audit programs, the length of service is outlined in the specific audit program policy guide. This agreement shall remain in effect for the length of time the auditee remains a participant in the specific audit program.
- b. Maintaining Certification** - That a company's information will only remain on the USDA website if any and all unannounced audits show satisfactory adherence to the program. If the minimum passing score is not achieved, the company's information will be removed from the website until a follow-up audit is conducted by AMS verifying that effective corrective actions have been taken and the company attains the minimum score on all appropriate scopes of the audit.

Approved By:

Should AMS personnel be at a facility for other purposes and notice issues that would jeopardize the company's standing on the specific audit program, AMS has the obligation to bring this to the attention of the company representative and, depending on the severity, withdraw certification.

Name of Applicant (Print): _____

Title: _____

Signature: _____

Date: _____

USDA Agricultural Marketing Service, Fruit & Vegetable Programs/ Federal or Federal-State Inspection Program Supervisor

Name of Representative (Print): _____

Title: _____

Signature: _____

Date: _____

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0125. The time required to complete this information collection is estimated average 8.5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202)720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410, or call (800)795-3272 (voice) or (202)720-6382 (TDD). USDA is an equal opportunity provider and employer.

General Questions

Resources

Standard Operating Procedure Worksheet

Employee Training Log

Deviations and Corrective Action Log

Example Traceback Log

Form 1 Sample Mock Audit Log

Form 2: Recall Product Information

Form 3: Sample Recall Contact List

Form 4: Recall Notification Form

Form 5: Recall Product Retrieval

Form 6: Recall Follow-Up Plan

Illness/Injury Report Form

Restroom Cleaning Log

Sample Soil Amendment Application Log

Recall Plan Checklist

Standard Operating Procedure - WORKSHEET

Below is a general outline for a Standard Operating Procedure. Please answer all of the questions with as much detail as possible. If a question does not apply to your procedure, please specify "N/A." This is not the only way to develop your Standard Operating Procedures (SOPs). There are many resources online to help in the construction of SOPs.

1.0 PURPOSE

Why do we need this procedure and what is to be accomplished?

2.0 SCOPE

To what areas will this procedure be applied?

3.0 REFERENCES

What documents are related to this procedure?

4.0 DEFINITIONS

Are there any words that require defining (acronyms, scientific terms, technical language)?

Employee Training Log

Training Topic: _____

Date/Training Time:

Trainer:

Location:

Training material (Please attach any written materials to this log with a staple):

Employee/Visitor Name (please print)	Employee Signature
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	
13.	
14.	

Deviations and Corrective Action Log

Instructions: List all major deviations, complaints and their related cause(s), corrective action(s), preventative measures and modified procedures. Record that employees have been trained on the new procedures.

Date/Time of Deviation or Complaint	Person Notified	Major Deviation/Complaint and Description	Corrective action	Course of action to prevent recurrence (e.g., training employee)	New/Modified Procedures	Employees Trained on New/Modified Procedures ? (✓)	Signature of trainer

Adapted by Washington State Department of Agriculture from existing public resources.

Form 1: Sample Mock Audit Log

Date Conducted: 9/10/11

Lot #: 310

Conducted by: *Sam*

Product traced: *Cucumbers*

Buyer Name: _____ Buyer phone: _____

Step backward	Step forward	Harvest date	Harvest Location	Harvester	Packing date	Packer	Shipping date	Customer(s) contacted	Amount of product remaining from original shipment at customer	Amount of Product Sold by Buyer
		9/10/11	<i>Field 13</i>	<i>Mary, Jon</i>	<i>9/11/11</i>	<i>Sam</i>	<i>9/11/11</i>	<i>LMNOP Distributors</i>	<i>2 Cases</i>	<i>25 cases</i>

Reviewed By: _____ Date _____

On-Farm Decision Tree Project: Traceability—v11 8/1/2014 10

E.A. Bihn, M.A. Schermann, A.L. Wszelaki, G.L. Wall, and S.K. Amundson, 2014

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Form 3: Sample Recall Contact List

Farm Name, Address, Contact person and phone number and/or Logo

Product Withdrawal: Still under the farm's control (at the warehouse, on the truck). Product has not reached the consumer.

Product Recall: In the hands of the consumers and the consumers need to be notified.

You should have a plan to handle product traceability, recovery and disposal of affected product. This may mean designating a field for disposal or a commercial landfill where it can be taken.

Farm Name

Name of Contact #1

Phone # (w)

Phone # (c)

Name of Contact #2

Phone # (w)

Phone # (c)

Buyer #1

Name of Contact #1

Phone # (w)

Phone # (c)

Name of Contact #2

Phone # (w)

Phone # (c)

Buyer #2

Name of Contact #1

Phone # (w)

Phone # (c)

Name of Contact #2

Phone # (w)

Phone # (c)

Buyer #3

Name of Contact #1

Phone # (w)

Phone # (c)

Name of Contact #2

Phone # (w)

Phone # (c)

Buyer #4

Name of Contact #1

Phone # (w)

Phone # (c)

Name of Contact #2

Phone # (w)

Phone # (c)

Other Relevant Contacts

Name of Auditor

Name of Company

Phone # (w)

Phone # (c)

Other Important Contacts

Name

Phone # (w)

Phone # (c)

To view Guidance for Industry, Product Recalls, Including Removals and Corrections, see <http://www.fda.gov/Safety/Recalls/IndustryGuidance/ucm129259.htm>

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www.gaps.cornell.edu

FORM 4

RECALL NOTIFICATION

The following information is to aid you when contacting people to recall your product. Fill out one sheet for each group contacted.

This is _____ I am calling from _____
Name of Recall Coordinator *your operation's name*
to notify you that all product _____ on _____ needs to be
lot # *date/time*

returned, destroyed, modified, etc.

I have the following questions to ask you about this recall:

1. Who do I speak to about a recall and what is their contact information?

Contact (name): _____

Phone Number: _____

Fax Number: _____

Title: _____

2. Do you have any of the product(s) being recalled? (If no, terminate questioning)

_____ YES _____ NO

If the answer to question #2 is YES, the product must be _____
returned, destroyed, modified, etc.

3. The _____ of this product will be dealt with by
return, destruction, modification, etc.

action intended

4. Have you received any reports of illness or injury related to this product?

_____ YES _____ NO

If yes, please provide details.

Thank you for your time.

Confirmation Signature: _____ **Date:** _____

FORM 5

PRODUCT RETRIEVAL

Quantity Shipped and Requiring Recovery (from Form 2)	Date/ Time (from Form 4)	Person Contacted	Quantity Recovered or Destroyed	Quantity Remaining With Contact	Action Taken and Description (e.g., picked up, returned, destroyed, etc.)	Quantity Recovered
TOTAL =						
(Total to equal the total on Form 2)						

FORM 6

FOLLOW-UP PLAN

1. Why was there a recall (i.e., what was the source of the problem)?

2. What corrective action(s) was/were taken? (*List and describe*)

3. What ongoing procedures did you put in place to prevent recurrence of the problem?

4. Identify the person(s) responsible for ensuring the above actions and procedures are monitored and implemented.

Confirmation Signature: _____ **Date:** _____

Illness/Injury Report Form^π

Completed forms will be collected and kept on file by the supervisor.

Worker Name: _____

Today's Date: _____

Person Completing Report: _____

INJURIES:

Date and Time of Injury: _____

Details of Injury: _____

Action taken (bandaged, sent to hospital, etc. Please identify which hospital if applicable):

ILLNESS:

Date and Time of First Illness Symptoms: _____

Symptoms: (check all that apply)

_____ Fever _____ Vomiting _____ Diarrhea

_____ Respiratory _____ Jaundice (e.g., yellowing of skin) _____ Nausea

_____ Sore Throat w/ Fever _____ Lesions (on exposed skin)

_____ Other (explain below)

Action taken if applicable (e.g., sent to hospital. Please identify which hospital if applicable):

Did the employee see a doctor? _____ Yes _____ No

(If yes, explain diagnosis if relevant and not confidential):

Date employee expects to return to work:

If returned to work on the same day, document if employee was assigned to fruit/vegetable handling job or a non-handling job, and for how long):

Restroom Cleaning Log

Date of Cleaning	Cleaned by	Supplies filled	Further actions necessary?

Reviewed by: _____ Date: _____

Sample Soil Amendment Application Log

Name of farm: Pleasant Valley Farm

This log should be used to record soil amendments applied to fields on your farm. Use one log for each crop for each season.

Date:	Plot:	Crop:	Quantity Used:	Type of Amendment:	Date Planted:	Date Harvested:	Application Method:	Initials:
5/2/2013	*A-1	Tomato	1.5 tons/acre	Composted manure	5/15/2013	7/1/2013	Broadcasting	ska

*This is the code name of the field/plot/row you have designated for that area (same as you will use in your traceability program). For example, A is the field and 1 is the plot within that field.

Reviewed by: _____ Title: _____ Date: _____

RECALL PLAN CHECKLIST

1. Create a Customer/Buyer Contact list. Be sure to update names, phone numbers, and emails annually or as needed.
 - Restaurants or buying club distributors: Two contacts in purchasing/shipping department
 - Your own CSA: All members by email or website
 - Farmer's Market/Roadside stand: Website for customers to look for information, email sign up sheet, signs posted at the market or roadside stand
2. Create a Recall Contact list. This list should include names and phone numbers of media representatives, proper authorities (FDA, NCDA&CS, etc.), your insurance company and your legal counsel.
3. Identify the problem (chemical, physical or microbial risks) and assess the health risks.
4. Determine the products and lot numbers involved. (Only strawberries, or one day's worth of all vegetables, etc.)
5. Determine quantities involved. (cases, boxes, etc.)
6. Determine current inventory on the premises.
7. Determine the amount of product in the marketplace.
8. Identify the customers/buyers who have received the product.
9. Collect pertinent documentation regarding the affected product.
 - Inputs and outputs of affected field associated with the lot number such as notes on flooding, wildlife activity, an ill employee, manure application, etc.
10. You will need to determine:
 - the total amount of suspect product shipped/delivered
 - the total amount of suspect product still in the buyer's procession
 - the total amount of suspect product the buyer has shipped
 - any product discarded
11. Upon completion of the mock recall, outline any issues in the recall plan and how you should change the recall plan to make it better. For example, taking longer than 2 hours and not being able to account for 100% of the product.

To conduct a mock recall, identify one of your products delivered to a customer on a specific date. Call the customer, with a lot number and shipping information and enquire where the product went. Also have the customer create or send you a copy of any written documentation to verify their distribution. This document should be in your food safety manual alongside mock recall log (where the date and this activity is recorded).

In the General Section, the auditor will look in your food safety manual for your traceability program and a record of a completed mock recall and award up to 25 points in questions G-1 and G-2. In Part One and Two, the auditor will look for a record showing how production fields and produce moving out of fields are identified and award up to 10 points for each question (1-26 and 2-21).

Audit Tip #6

Get marketing mileage out of your traceability plan.

A majority of the farms in our study sold directly to the consumer through CSA programs, roadside stands and farmers' markets. In the event of a recall, contacting these types of customers can be difficult to unrealistic. Some of the ways small-farm operators can contact these types of patrons are through email sign up sheets, website notifications, and signs at the farmstand/farmers' markets. The system created by preparing for a recall has marketing benefits as well, as having customer email lists and proactively communicating with direct market clients can help build your brand.

Part 1

Farm Review

Resources

Standard Operating Procedure Worksheet

Employee Training Log

Deviations and Corrective Action Log

Water Source Testing Log

Water Testing Result Log

Septic System Inspection Log

Pest/Rodent Control Log

Compost Time/Temperature Log

Manure Application Log

Standard Operating Procedure - WORKSHEET

Below is a general outline for a Standard Operating Procedure. Please answer all of the questions with as much detail as possible. If a question does not apply to your procedure, please specify "N/A." This is not the only way to develop your Standard Operating Procedures (SOPs). There are many resources online to help in the construction of SOPs.

1.0 PURPOSE

Why do we need this procedure and what is to be accomplished?

2.0 SCOPE

To what areas will this procedure be applied?

3.0 REFERENCES

What documents are related to this procedure?

4.0 DEFINITIONS

Are there any words that require defining (acronyms, scientific terms, technical language)?

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Employee Training Log

Training Topic: _____

Date/Training Time:

Trainer:

Location:

Training material (Please attach any written materials to this log with a staple):

Employee/Visitor Name (please print)	Employee Signature
1.	
2._	
3._	
4._	
5._	
6._	
7._	
8._	
9._	
10._	
11._	
12._	
13._	
14._	

Deviations and Corrective Action Log

Instructions: List all major deviations, complaints and their related cause(s), corrective action(s), preventative measures and modified procedures. Record that employees have been trained on the new procedures.

Date/Time of Deviation or Complaint	Person Notified	Major Deviation/Complaint and Description	Corrective action	Course of action to prevent recurrence (e.g., training employee)	New/Modified Procedures	Employees Trained on New/Modified Procedures ? (✓)	Signature of trainer

Water Source Testing Log

Save any document providing information on test methods and test results from your laboratory.

Test Date	Water source (surface, well)	Laboratory	Test Run / Results	Corrective actions if necessary	Initials
9/10/11	Well water	Minnesota Valley Testing Lab	Nitrites, nitrates, Total coliforms. All within normal levels	None needed	MP

Reviewed by: _____ Date: _____

Water Testing Result Log

Save any documents providing information on test methods and test results from your laboratory.

Date	Water Source (Type/ Location/Name)	Laboratory	Type of Test Performed	Results	Corrective Actions (if necessary)	Initials

Septic System Inspection Log

Name of farm: _____ Age of system: _____
 Type of system: _____

Date:	Observations of Drain field:	Tank Condition	Lid Condition	Identified by (Initials):	Corrective Actions:	Date Corrective Action Completed:	Completed by (Initials):
4-26-14	Smelly odor, soggy ground	intact	intact	ABC	Had it pumped, receipt on file. No risk to crops, located well away from growing area.	5-5-14	ALW

Reviewed by: _____ Title: _____ Date: _____

Pest/Rodent Control Log ^π

Name of Operation:

Pest/Rodent Company Used* or Self	Date of Service or Action Taken	Type of Pest	Type of Control**	Location of Traps	Traps Checked (date)	Checked by (name)	Disposal Means

*If using a company for service, attach report or receipt of service for each of their visits.

**List type of control methods used such as exclusion, traps, poison, repellants, etc.

^π Michele Schermann, University of Minnesota, FSP4U A Food Safety Plan (Template) for You. <http://safety.cfans.umn.edu/pdfs/FSP4U.pdf>

Part 2 Field Harvest & Packing

Resources

Standard Operating Procedure Worksheet

Employee Training Log

Deviations and Corrective Action Log

Risk Assessment: Previous Land Use and Site Selection

General Harvest Cleaning Log

Sample Field Policy - Imperial's Garden

Harvest Tool and Container Cleaning Log

Cleaning and Sanitizing Tools and Harvest Containers

Delivery Vehicle Inspection and Cleaning Log

Water Treatment Log

Sample Tools and Equipment Cleaning and Sanitizing Log

Equipment List

Example Traceback Log

Standard Operating Procedure - WORKSHEET

Below is a general outline for a Standard Operating Procedure. Please answer all of the questions with as much detail as possible. If a question does not apply to your procedure, please specify "N/A." This is not the only way to develop your Standard Operating Procedures (SOPs). There are many resources online to help in the construction of SOPs.

1.0 PURPOSE

Why do we need this procedure and what is to be accomplished?

2.0 SCOPE

To what areas will this procedure be applied?

3.0 REFERENCES

What documents are related to this procedure?

4.0 DEFINITIONS

Are there any words that require defining (acronyms, scientific terms, technical language)?

Employee Training Log

Training Topic: _____

Date/Training Time:

Trainer:

Location:

Training material (Please attach any written materials to this log with a staple):

Employee/Visitor Name (please print)	Employee Signature
1.	
2._	
3._	
4._	
5._	
6._	
7._	
8._	
9._	
10._	
11._	
12._	
13._	
14._	

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Deviations and Corrective Action Log

Instructions: List all major deviations, complaints and their related cause(s), corrective action(s), preventative measures and modified procedures. Record that employees have been trained on the new procedures.

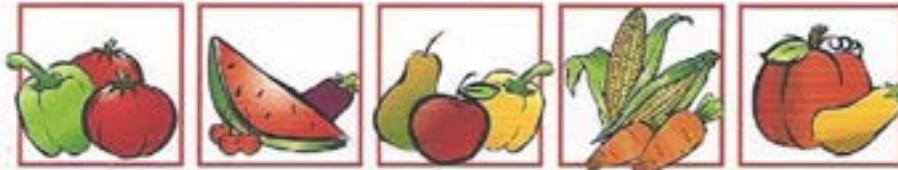
Date/Time of Deviation or Complaint	Person Notified	Major Deviation/Complaint and Description	Corrective action	Course of action to prevent recurrence (e.g., training employee)	New/Modified Procedures	Employees Trained on New/Modified Procedures ? (✓)	Signature of trainer

Adapted by Washington State Department of Agriculture from existing public resources.

RISK ASSESSMENT: Previous Land Use and Site Selection

Inspection Date:	Location/Field:	Physical, Chemical and/or Biological Contamination Risks Identified?	Corrective and/or Preventative Actions (if necessary):	Identified by (Initials):	Date Corrective Action Completed:	Completed by (Initials):

IMPERIAL'S GARDEN



3.12.2 Field Policies

- Hands are to be washed and sanitized before commencing work and break, also after break and when work is completed.
- No children or infants are allowed in the fields
- No animals are allowed.
- No food within 20 feet of the product field.
- No drugs, alcohol or tobacco use:
 - I. **Use of any of these substances in the product field will be terminated immediately.**
- No jewelry or clothing with little rocks is to be worn during harvest or general field work.
- Harvesters are not permitted to use cell phones unless:
 - I. Emergency
 - II. Call foremen or managers of possible food safety
- When items are dropped on the floor they are to be discarded.
- Do not pick decayED vegetables
- Employees will stay at their designated area of operations.
- Produce boxes, lugs and bins are only used for produce
 - No cross contamination
 - Mark "X" on unused cases
 - Non-solid plastic bins are used only for produce
 - Boxes and lugs must be on a pallet at all times
- When evidence of animal intrusion is discovered by an employee it must immediately be reported to management so the proper actions can be taken.
 - I. Corrective Actions for Animal presence in order:
 1. Contact foremen
 2. Foremen will veer the animal outside the product field and ensure it does not come back to the product field.
 3. If the animal seems dangerous to veer away foremen will contact Animal Control (509)-575-6038 and notify managers and owners.
 - II. Corrective Actions for fecal matter, deceased animals, or any other in order:
 1. Contact foremen

2. Foremen will mark the area with markings. (5 feet radius away from the matter)
3. Remove the matter with proper protective gear so that no further contamination will be on the field and product.
4. He/she will notify Food Safety Manager or Owner.
5. Owner, Management and foremen will evaluate the area.

Cleaning and Sanitizing Tools and Harvest Containers

This fact sheet is part of a series about food safety on the farm for fruit and vegetable growers. Developed for the Minnesota Fruit and Vegetable Growers Association by Michele Schermann and Annalisa Hultberg. Reviewed by Dr. Cindy Tong.

Using clean containers and tools can help decrease postharvest losses on sensitive products like summer squash, tomatoes and berries, as well as reduce the chance of spreading foodborne illness-causing pathogens.

All reusable harvest containers and tools should be kept as clean as possible and regularly disinfected. At least weekly, or as often as needed, reusable produce bins, buckets, totes and other containers, should be cleaned of excess soil, vegetable matter and other debris. Tools should be cleaned daily or as needed to keep them clean.

Sanitize tools and totes several times throughout the growing season, and at the end and beginning of each season. A sanitizing solution, such as a weak (50 - 150 ppm) bleach solution, should be applied to harvest tools and containers after cleaning and as needed to kill pathogens.

Cleaning Procedure

Clean harvest containers, tools and food contact surfaces before sanitizing. Sanitizers are more effective if the surfaces are clean and free of soil and other debris.



Wash harvest totes and tools as often as needed to keep them free of excess debris and soil.

- Rinse surface of container to remove soil and debris.
- Wash surface of container with detergent and water. For harvest containers, use a high-pressure sprayer hose.
- Rinse with clean potable water.

Any detergent can be used for the wash step on hard surfaces. Only detergents/

For more information on Cleaning and Sanitizing

- Cleaning and Sanitizing Guide, Iowa State University Extension.
- Guidance for Industry: Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables, FDA.
- GAP: A Self-Audit for Growers and Handlers, UC Davis

soaps that come in contact with food need to be labeled as safe for food. Read the label and make sure you follow the instructions on the label.

Sanitizing harvest containers, tools and food contact surfaces

- Apply a fine mist of sanitizer solution to surfaces using a sprayer. (See below for sanitizing products)
- Let containers, tools and surfaces air dry. Do not dry with towels.

Sanitizing Products

Sanitizing can be done with a number of products. Many companies, such as EcoLab, have hydrogen peroxide-based products that are formulated specifically for sanitizing hard surfaces.

Bleach solution (50 ppm is about 1.5 tablespoons of household chlorine bleach per five gallons of water) is an inexpensive and commonly used sanitizing solution.

Vinegar is not an acceptable sanitizer, as it does not adequately sanitize surfaces.

If you are certified organic, there are many allowable solutions to use, but make sure you check with your certifying agency first.

Whatever sanitizer you use, you will need to monitor the concentration to make sure that it is the correct strength. In the case of chlorine bleach, use test strips¹ to make sure the solution is at the needed strength.

Other sanitizers will have different recommended concentrations. Follow all

label directions carefully, and wear protective gear (e.g. gloves, goggles) when pouring all sanitizers; they are dangerous when undiluted.

Many companies have formulations that are specific to hard surfaces.

Sanitizers for Use on Hard Surfaces²

Chlorine bleach (*hypochlorite*):

Assuming a 5.25% hypochlorite in household bleach, use 1 cup per 50 gallons or 1.5 tablespoons per 5 gallons and check with chlorine tester strips for ~50ppm.

EcoLab: numerous hard surface formulations: <http://www.ecolab.com>

Sanidate 5.0: <http://www.johnnyseeds.com/p-8467-sanidate-5-0-liquid-sanitizer-og-2-12-gal-.aspx>

StorOx 2.0 hydrogen peroxide-based sanitizer (Biosafe Systems): <http://www.biosafesystems.com/Product-Ag-StorOx.asp>

Some detergents and sanitizers are dangerous to use, so protecting workers and farmers is important; read the labels.

¹Test strips for chlorine are available at restaurant supply stores, and online. Test strips for other products are available from the product supplier.

²These are commonly used sanitizers. This list is for information and should not be viewed as an endorsement of a product by the University of Minnesota, the Minnesota Fruit and Vegetable Growers Association, Minnesota Department of Agriculture, or the USDA.



Photos: M. Schermann. Support for this project was provided to the Minnesota Fruit and Vegetable Growers Association through the Specialty Crop Block Grant Program – Farm Bill, through the Minnesota Department of Agriculture and the USDA – AMS. These institutions are equal opportunity providers. (2012)

Water Treatment Log^È

Name of Operation: _____

Date	Water pH Level	Type of Chemical Used	Amount Added	Type of Produce Being Run	Initials

^È Cornell - Food Safety Begins on the Farm Good Agricultural Practices for Fresh Fruits and Vegetables *A Grower's Guide*.
Written and compiled by: Anusuya Rangarajan, Elizabeth A. Bihn, Robert B. Gravani, Donna L. Scott, and Marvin P. Pritts *Field Sanitation and Animal Exclusion*

Sample Tools and Equipment Cleaning and Sanitizing Log

Name of farm: Pleasant Valley Farm

C=Cleaned S=Sanitized

Date	Cleaning List (check each)				Treatment	Cleaned by (initials):
	Knives	Buckets	Gloves/ Aprons	Packaging Containers		
9-17-13	C/S	C		C/S	Washed with dishwashing soap, rinse with tap water, sanitized with 100 ppm chlorine solution dip for 20 seconds.	GLW

Reviewed by: _____ Title: _____ Date: _____

Part 3 House Packing

Resources

Standard Operating Procedure Worksheet

Employee Training Log

Deviations and Corrective Action Log

Sample Water Monitoring Log

Water Treatment Log

Sample House Packing Policy - Imperial's Garden

Break Area Cleaning Log

Delivery Vehicle Inspection and Cleaning Log

Sample Tools and Equipment Cleaning and Sanitizing Log

Building Repair, Cleaning, and Maintenance Checklist

Standard Operating Procedure - WORKSHEET

Below is a general outline for a Standard Operating Procedure. Please answer all of the questions with as much detail as possible. If a question does not apply to your procedure, please specify "N/A." This is not the only way to develop your Standard Operating Procedures (SOPs). There are many resources online to help in the construction of SOPs.

1.0 PURPOSE

Why do we need this procedure and what is to be accomplished?

2.0 SCOPE

To what areas will this procedure be applied?

3.0 REFERENCES

What documents are related to this procedure?

4.0 DEFINITIONS

Are there any words that require defining (acronyms, scientific terms, technical language)?

Employee Training Log

Training Topic: _____

Date/Training Time:

Trainer:

Location:

Training material (Please attach any written materials to this log with a staple):

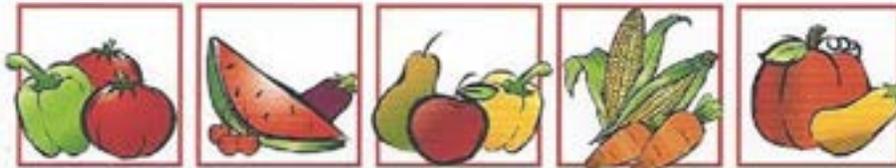
Employee/Visitor Name (please print)	Employee Signature
1.	
2._	
3._	
4._	
5._	
6._	
7._	
8._	
9._	
10._	
11._	
12._	
13._	
14._	

Deviations and Corrective Action Log

Instructions: List all major deviations, complaints and their related cause(s), corrective action(s), preventative measures and modified procedures. Record that employees have been trained on the new procedures.

Date/Time of Deviation or Complaint	Person Notified	Major Deviation/Complaint and Description	Corrective action	Course of action to prevent recurrence (e.g., training employee)	New/Modified Procedures	Employees Trained on New/Modified Procedures ? (✓)	Signature of trainer

IMPERIAL'S GARDEN



Packing House Policies

Good Manufacturing and Hygiene Practices

The following good manufacturing and personnel hygiene practices have been established and communicated to all employees as a mandatory rule:

- Wash hands thoroughly with soap and warm water, and sanitize, before starting work, after each absence from the work station, after using the restroom, after breaks and at any other time when the hands may have become exposed to soil or contaminated.
- Maintain adequate personal cleanliness. Keep hair tied or short, trimmed and clean fingernails, and, if gloves are not used, free of nail polish.
- Smoking, eating or drinking is not allowed in work areas.
- Personal items are not allowed in work areas (bags, purses, jewelry, watches, musical dev., etc)
- The use of cell phones is not allowed or any electronic devices while working.
- Wear outer garments and remove all items from top outside pockets.
- Remove all protective and outer garments and store them in a designated area when on break and before using the restrooms.
- All minor cuts and wounds must be covered with waterproof detectable blue bandages with metal strip.
- Report any cuts and/or any illnesses that might be a contamination risk to the fresh product.
- Any person showing boils, sores, open wounds or exhibiting signs of food-borne illness must be excluded from operations involving direct and indirect food contact.
- No animals allowed

- No children or infants allowed
- Employees will stay at their designated area of operations.
- Produce boxes, lugs and bins are only used for produce
 - No cross contamination
 - Mark “X” on unused cases
 - Non-solid plastic bins are used only for produce
 - Boxes and lugs must be on a pallet at all times

When in direct contact to food:

- Wear gloves. (If gloves are taken home, employees need to discard it. Only use latex free gloves)
- Wear hats or hairnets.
- No jewelry is allowed, except a plain wedding band.

Corrective Actions

All employees must follow the GM&HP as mandatory rules. If any employee is not in compliance and breaking the food safety rules the following corrective actions must be taken by the immediate supervisor:

- Remind the employee of the rule being broken
- Employee must correct behavior and leave the facility if not able to fulfill the food safety rules (i.e. if he has not reported he is sick)
- Verbal warning for non-complying to the food safety rules
- If reoccurrence, a first written warning will be issued
- If second reoccurrence, a second written warning will be issued and employee will be suspended
- If third reoccurrence, employee will be terminated
- In case of a non-compliance visitor or contractor, the person will receive a verbal warning and will be requested to take a corrective action according to the situation; if the person does not follow the instructions given by the Supervisor or area Manager, the person will be requested to leave the facility.
- If animals is found around the Packing House corrective action will be in accordance with **3.12.2 Field Policies**

Sickness Reports / Return to work policy

When an employee has reported sick/illness, the Supervisor or area Manager must fill a sick/illness report, and the employee will be authorized to return to work if:

- Employee meets the GM&HP stated above and no signs of illness are detected, and/or

- Employee presents a doctor's note stating that he/she can safely return to work. The return to work policy has been communicated to all employees as part of the GMP training program.

General Rules for Glass

- All lights with the production, storage and maintenance areas are protected in some manner. Where Teflon coated bulbs have been used, copies of invoices have been retained.
- No glass items are stored in the storage, production or maintenance areas.
- Glass items are allowed in the break room only – these do enter the production, storage or maintenance areas.
- Staff is not permitted to bring glass into the storage, production or maintenance areas.
- Glass thermometers are not allowed inside the storage and production areas.
- Windows inside the production, storage and maintenance areas are either made of plastic or have been laminated.
- There are no glass skylights in the facility.

Break Area Cleaning Log

Date:	Cleaned by :	Supplies filled as applicable:	Further actions necessary?

Sample Tools and Equipment Cleaning and Sanitizing Log

Name of farm: Pleasant Valley Farm

C=Cleaned S=Sanitized

Date	Cleaning List (check each)				Treatment	Cleaned by (initials):
	Knives	Buckets	Gloves/ Aprons	Packaging Containers		
9-17-13	C / S	C		C / S	Washed with dishwashing soap, rinse with tap water, sanitized with 100 ppm chlorine solution dip for 20 seconds.	GLW

Reviewed by: _____ Title: _____ Date: _____

Building Repair, Cleaning, and Maintenance Checklist

Instructions: *Inspect both the interior and exterior of your buildings (e.g., packinghouse, storage areas) monthly when in use and where possible.*

Completed by: _____ **Date:** _____

Building ID #/Name: _____

Interior of Building (Permanent Structures)	Exterior of Building (Permanent Structures)
<ul style="list-style-type: none"><input type="checkbox"/> No holes/crevices/leaks in the building (e.g., walls, windows, screens)<input type="checkbox"/> Lights are shatterproof and adequate<input type="checkbox"/> No pipes or condensation leaking<input type="checkbox"/> Floor drainage is good (floor sloped, drain covers clear)<input type="checkbox"/> Floors, walls and ceilings are clean and free from garbage, spills, rodent droppings, etc.<input type="checkbox"/> Floor is free of crevices that could harbour pests or debris<input type="checkbox"/> Fans are dust-free and clean<input type="checkbox"/> Animals (wild or domestic), pests (insects, rodents, etc.) and bird nests are not present<input type="checkbox"/> All materials are in designated areas (e.g., packaging materials and product)	<ul style="list-style-type: none"><input type="checkbox"/> No holes/crevices/leaks in the building (e.g., walls, windows, screens)<input type="checkbox"/> All windows can be closed OR have close-fitting screens that are in good condition<input type="checkbox"/> ½ meter wide perimeter strip of stone or crushed gravel OR short grass around building<input type="checkbox"/> No junk piled within 3 m of building (e.g., old or unused machinery, garbage)<input type="checkbox"/> Weeds are controlled<input type="checkbox"/> Land drainage around building is good<input type="checkbox"/> Dumpsters are emptied as needed to prevent pest infestation, and surroundings are free of debris<input type="checkbox"/> All doors are close-fitting<input type="checkbox"/> Doors that can be secured (i.e., to lock storages when unsupervised)
	<p style="text-align: center;">Exterior of Building (Non-Permanent Structures)</p> <ul style="list-style-type: none"><input type="checkbox"/> Roof or cover (i.e., tarp)<input type="checkbox"/> Land drainage around structure is good<input type="checkbox"/> No areas where pests can live/feed/hide within 3 m of structure (e.g., old or unused machinery, garbage)<input type="checkbox"/> Weeds are controlled



Part 4 Storage & Transport

Resources

Standard Operating Procedure Worksheet

Employee Training Log

Deviations and Corrective Action Log

Sample Tools and Equipment Cleaning and Sanitizing Log

Equipment Inspection, Cleaning, Maintenance and Calibration

Pest/Rodent Control Log

Preventive Cleaning/Maintenance Schedule

Building Repair, Cleaning, and Maintenance Checklist

Delivery Vehicle Inspection and Cleaning Log

Cooler Temperature Log

Thermometer Calibration Log

Refrigerated Vehicle Temperature Monitoring

Standard Operating Procedure - WORKSHEET

Below is a general outline for a Standard Operating Procedure. Please answer all of the questions with as much detail as possible. If a question does not apply to your procedure, please specify "N/A." This is not the only way to develop your Standard Operating Procedures (SOPs). There are many resources online to help in the construction of SOPs.

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2.0 SCOPE

To what areas will this procedure be applied?

3.0 REFERENCES

What documents are related to this procedure?

4.0 DEFINITIONS

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Training Topic: _____

Date/Training Time:

Trainer:

Location:

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Employee/Visitor Name (please print)	Employee Signature
1.	
2._	
3._	
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Deviations and Corrective Action Log

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Date/Time of Deviation or Complaint	Person Notified	Major Deviation/Complaint and Description	Corrective action	Course of action to prevent recurrence (e.g., training employee)	New/Modified Procedures	Employees Trained on New/Modified Procedures ? (✓)	Signature of trainer

Adapted by Washington State Department of Agriculture from existing public resources.

Sample Tools and Equipment Cleaning and Sanitizing Log

Name of farm: Pleasant Valley Farm

C=Cleaned S=Sanitized

Date	Cleaning List (check each)				Treatment	Cleaned by (initials):
	Knives	Buckets	Gloves/ Aprons	Packaging Containers		
9-17-13	C / S	C		C / S	Washed with dishwashing soap, rinse with tap water, sanitized with 100 ppm chlorine solution dip for 20 seconds.	GLW

Reviewed by: _____ Title: _____ Date: _____

Equipment Inspection, Cleaning, Maintenance and Calibration

Record required activities below and give a brief description of why/how you are performing the activity.

Date	Employee Completing Job	Equipment Activity Performed On	Activity Code*	Brief Description of Activity

*** Activity Codes:**

- 1 - Calibration
- 2 - Maintenance
- 3 - Repair
- 4 - Cleaning/Sanitation
- 5 - Inspection/Other

Adapted by Washington State Department of Agriculture from existing public resources.

Pest/Rodent Control Log ^π

Name of Operation:

Pest/Rodent Company Used* or Self	Date of Service or Action Taken	Type of Pest	Type of Control**	Location of Traps	Traps Checked (date)	Checked by (name)	Disposal Means

*If using a company for service, attach report or receipt of service for each of their visits.

**List type of control methods used such as exclusion, traps, poison, repellants, etc.

Preventive Cleaning/Maintenance Schedule

Use this schedule to keep track of the frequency of cleaning and sanitation which covers all food and non-food contact surfaces in your packinghouse including floors, drains, walls, ceilings, transporting equipment (e.g. pallet jacks, carts, trolleys and forklifts) if applicable, cooling equipment, foreign material control devices (if applicable), food contact equipment, tools and utensils and other surfaces that may pose a contamination risk.

Area to be Cleaned/Preventative Maintenance to be Done (e.g. packinghouse floor drains, routine maintenance of conveyor belt etc.)	Frequency (daily, weekly, monthly etc)	Person(s) responsible

Building Repair, Cleaning, and Maintenance Checklist

Instructions: *Inspect both the interior and exterior of your buildings (e.g., packinghouse, storage areas) monthly when in use and where possible.*

Completed by: _____ **Date:** _____

Building ID #/Name: _____

Interior of Building (Permanent Structures)	Exterior of Building (Permanent Structures)
<ul style="list-style-type: none"><input type="checkbox"/> No holes/crevices/leaks in the building (e.g., walls, windows, screens)<input type="checkbox"/> Lights are shatterproof and adequate<input type="checkbox"/> No pipes or condensation leaking<input type="checkbox"/> Floor drainage is good (floor sloped, drain covers clear)<input type="checkbox"/> Floors, walls and ceilings are clean and free from garbage, spills, rodent droppings, etc.<input type="checkbox"/> Floor is free of crevices that could harbour pests or debris<input type="checkbox"/> Fans are dust-free and clean<input type="checkbox"/> Animals (wild or domestic), pests (insects, rodents, etc.) and bird nests are not present<input type="checkbox"/> All materials are in designated areas (e.g., packaging materials and product)	<ul style="list-style-type: none"><input type="checkbox"/> No holes/crevices/leaks in the building (e.g., walls, windows, screens)<input type="checkbox"/> All windows can be closed OR have close-fitting screens that are in good condition<input type="checkbox"/> ½ meter wide perimeter strip of stone or crushed gravel OR short grass around building<input type="checkbox"/> No junk piled within 3 m of building (e.g., old or unused machinery, garbage)<input type="checkbox"/> Weeds are controlled<input type="checkbox"/> Land drainage around building is good<input type="checkbox"/> Dumpsters are emptied as needed to prevent pest infestation, and surroundings are free of debris<input type="checkbox"/> All doors are close-fitting<input type="checkbox"/> Doors that can be secured (i.e., to lock storages when unsupervised)
	<p style="text-align: center;">Exterior of Building (Non-Permanent Structures)</p> <ul style="list-style-type: none"><input type="checkbox"/> Roof or cover (i.e., tarp)<input type="checkbox"/> Land drainage around structure is good<input type="checkbox"/> No areas where pests can live/feed/hide within 3 m of structure (e.g., old or unused machinery, garbage)<input type="checkbox"/> Weeds are controlled

Delivery Vehicle Inspection and Cleaning Log

Date	Vehicle Description	Inspection Results	Actions Taken	Initials
9/10/11	Delivery Van	Trash in back, dog hair present	Vacuumed and removed trash	MP

Reviewed by: _____

Date: _____

Cooler Temperature Log ^π

Name of operation: -----

Storage Cooler number: _____ Thermometer number: _____

Please see the OFFS Project Resources section for thermometer calibration instructions at <http://onfarmfoodsafety.org/resources/risk-assessment-resources/>.

Date	Thermometer Calibrated Date	Recorded temperature		Corrective actions if necessary:	Result of corrective actions and date accomplished	Initials
		AM	PM			

Thermometer Calibration Log^π

Thermometer Calibration Date:	Deviation from 32° F?	Corrective Actions (if necessary):	Result of Corrective Actions and Date Accomplished:	Initials

Bridging the GAPS

FARMER GUIDE





Washington
State Department of
Agriculture

For more information, visit WSDA's Bridging the GAPs
website at agr.wa.gov/inspection/GAPGHP